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FEDERATION OF MALAYA

# REPORT

OF THE

# MEDICAL DEPARTMENT

FOR THE YEAR

1951



By

DR. R. D. GROSS

M.D., D.P.H., D.T.M. & H.

Acting Director, Medical Services









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## FOREWORD.

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The vital statistics for the year show a steady improvement in the health of the population.

The birth rate has increased from 42.0 to 43.6 per 1,000 and the death rate has decreased from 15.8 to 15.3 per 1,000. Infantile mortality rate for all races has declined from 102 to 97 per 1,000 live births. It is to be observed, however, that on analysis the infantile mortality rate tends to show an increase in the proportion of infant deaths among the Chinese population.

Malaria has shown a slight increase in incidence whereas Pulmonary Tuberculosis has shown an appreciable decrease.

The resettlement of squatters has created an additional responsibility for the Medical Department. Considerable added risks to the health of these people from communicable diseases has arisen from their being brought together in closer contact in these New Villages. But against these additional risks it is now possible to extend more readily medical facilities previously not easily available to them owing to the fact that they lived in houses in widely scattered and isolated positions.

With the introduction of the Member System in April, 1951, the Medical and Health Services were included in the portfolio of the Member for Health, the Hon'ble Dr. Lee Tiang Keng, C.B.E., J.P.





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# FEDERATION OF MALAYA.

## REPORT OF THE MEDICAL DEPARTMENT FOR THE YEAR 1951.

### PART I.

1. CLIMATE.—The climate of Malaya is fairly healthy but it is monotonously warm with a high humidity. The average daily temperature is 80°-90° F. with a drop of 5°-20° F. at night. The average annual rainfall is approximately 100 inches.

2. AREA.—The land coming within the administration of the Federation of Malaya is a peninsula situated between 7°-and 1° North and 100° and 104° East. No part of it is more than 100 miles from the sea. The area of the States and Settlements is shown below:

Kedah	...	...	...	...	3,648	sq. miles
Perlis	...	...	...	...	310	„
Penang	...	...	...	...	110	„
Province Wellesley	...	...	...	...	290	„
Perak	...	...	...	...	7,980	„
Selangor	...	...	...	...	3,160	„
Negri Sembilan	...	...	...	...	2,580	„
Malacca	...	...	...	...	640	„
Johore	...	...	...	...	7,878	„
Kelantan	...	...	...	...	5,870	„
Trengganu	...	...	...	...	5,000	„
Pahang	...	...	...	...	13,820	„
Total Federation of Malaya					51,286	„

3. POPULATION.—The estimated mid-year population of the Federation was 5,337,222, comprising Malaysians 2,631,154, Chinese 2,043,971, Indians 586,371 and others 75,726. This total showed an increase of 110,673 persons over the mid-year 1950 figure of 5,226,549.

By States and Settlements, the 1951 population is as follows:

States/Settlements.		Estimated population mid-year 1950.		Estimated population on 31-12-50.		Estimated population mid-year 1951.
Kedah	...	589,200	...	596,757	...	602,278
Perlis	...	74,887	...	75,790	...	76,315
Penang and Province Wellesley		473,227	...	478,945	...	481,748
Perak	...	1,018,603	...	1,031,957	...	1,041,861
Selangor	...	764,282	...	776,182	...	783,545
Negri Sembilan	...	288,548	...	293,067	...	296,483
Malacca	...	258,508	...	261,617	...	263,953
Johore	...	797,942	...	809,142	...	817,121
Kelantan	...	464,313	...	467,828	...	470,523
Trengganu	...	233,171	...	234,591	...	236,335
Pahang	...	263,868	...	265,832	...	267,060
Total Federation		5,226,549	...	5,291,708	...	5,337,222



## (2)—ADMINISTRATION.

4. ORGANISATION.—Public health organisation is signified under the headings of Federal and State or Settlement activities. This follows the general pattern of administration and covers public health policy with special reference to the enforcement of quarantine and the control of epidemic diseases.

Hospitals exist in all the centres of large populations and these hospitals are administered by the head of the Medical Department in the various States and Settlements.

Medical Officers of Health together with a team of Sanitary Inspectors are stationed in all densely-populated areas, and their activities cover both urban and rural districts.

There are Specialist Officers in all the main hospitals in the Federation and they may be called upon to visit and advise in any State or Settlement within the Federation.

A Municipality or "Town Board" exists in all the main towns and this body is responsible for the prevention of infectious diseases within its boundaries. The health of labour forces on estates and mines is under the care of estate practitioners but the Government Health Department exercises supervision under the Labour Code to ensure that there is a reasonable minimum standard for housing and water supplies, and that control of malaria is carried out by draining, oiling or the administration of prophylactic drugs. Most of the labour on estates have now been regrouped due to the activities of Communist terrorists.

Much of the rural population which was previously widely scattered has now been concentrated in villages for the same reason.

This has enabled the Medical Department to extend its services more readily to this population.

The staff employed throughout the country on public health work, exclusive of Municipalities, which have their own health staff, is made up as follows:

Medical Officers of Health	...	...	29
Health Inspectors or Sanitary Inspectors	...	...	129
Public Health Sisters	...	...	19
Public Health Nurses	...	...	83

5. EXPENDITURE ON MEDICAL AND HEALTH SERVICES.—The total direct expenditure by Federal, State and Settlement Governments on Medical and Health Services was \$38,693,817. This figure does not take into account the large sums of money expended by Municipal Health agencies in their spheres of administration.

Estates maintain their own hospitals and have their own medical practitioners who visit periodically. They also undertake their own anti-malarial measures. An indication of the vast extent of health services on estates can be gauged by the fact that in the Federation they maintain an overall hospital accommodation of 5,858 beds.



6. STAFF.—Dr. R. B. MacGregor, C.M.G., Director of Medical Services, proceeded on leave prior to retirement, with effect from 4th January, 1951, after 31 years' service in Malaya.

The Deputy Director of Medical Services, Dr. E. A. Struthers, acted as Director of Medical Services till 5th October, 1951, when he, too, proceeded on leave prior to retirement, and Dr. R. D. Gross is now acting as Director of Medical Services.

The shortage of qualified medical staff is still very serious. While recruits from the University of Malaya are increasing in numbers, there has been a steady loss of senior officers. In spite of this, every effort has been made to allow local doctors and nurses to obtain advanced training overseas.

At the end of the year the position in the Federation was that out of an establishment of 338 posts for medical officers 110 were unfilled and a further 56 were held by temporary officers as compared with 134 unfilled and 39 held by temporary officers out of an establishment of 330 in 1950. The figures shown make no provision for leave reserve. Details of establishment and present staff are given in the appendix (Table 15).

7. LEGISLATION.—Legislation considered during the year under review in relation to new laws pertaining to medical matters (or to an extension of existing Enactments) comprised the following:

The Deleterious Drugs Enactment (Johore Enactment No. 96);

The Nurses Registration (Amendment) Regulation, 1951;

The Prevention of Diseases Enactment (Application to Perlis) Ordinance, 1951;

The Registration of Pharmacists Ordinance, 1951.

## PART II.

### PUBLIC HEALTH—(1) VITAL STATISTICS.

8. The Vital Statistics for the year 1951 show a steady improvement in the health of the population.

The general birth-rate is 43.6 per 1,000 population at mid-year 1951. The general death-rate is 15.3 per 1,000, while the infantile death-rate decreased to 97 per 1,000 live births.

9. POPULATION.—The estimated population of the Federation at mid-year 1951 was 5,337,222. Details are given earlier in the report (paragraph 3).

10. BIRTHS AND DEATHS—*Births*.—Live Births registered in 1951 were 232,896 (119,278 males and 113,618 females) as compared with 219,512 in 1950. This gives an average of 19,408 per month against 18,293 in 1950.

The birth-rate for all races was 43.6 per 1,000 (42.0 in 1950).

By races the birth-rates were:

				1950 Rates
Malaysians	...	...	44.9 per 1,000	41.9
Chinese	...	...	41.9 ,,	41.7
Indians and Pakistanis	...	...	45.5 ,,	44.9
Others	...	...	30.8 ,,	30.1

The number of births registered during the year 1951 was the greatest ever recorded and showed an increase in all communities.

DEATHS.—Deaths registered in 1951 were 81,630 which is 924 less than recorded for 1950 (82,554). The death-rate for all races, calculated on the mid-year population was 15.3 per 1,000.

The corresponding death-rate for 1950 was 15.8.

The death-rates by races were:

				1950 Rates
Malaysians	...	...	17.3 per 1,000	18.7
Chinese	...	...	13.4 ,,	12.7
Indians and Pakistanis	...	...	13.3 ,,	13.6
Others	...	...	11.2 ,,	13.6

11. INCREASE OF POPULATION.—The “natural” increase (births minus deaths) therefore amounted to no less than 151,266 which is 2.8 per cent. of the estimated mid-year population, whereas in England and Wales, with an estimated mid-year population of 43,800,000 the figure is .29 per cent. resulting from a “natural” increase of 130,579 during the corresponding period.

12. INFANT MORTALITY.—The deaths of infants under one year numbered 22,663 out of 81,630 deaths at all ages. There were 232,896 live births, and the infantile mortality rate was 97 per 1,000 live births. The corresponding figures for 1950 were 22,301 under one year out of 88,554 with an infantile mortality rate of 102.

The racial distribution of infantile mortality is as follows: (The corresponding figures for 1950 are in brackets).

Races.	Infant Deaths.	Births.	Monthly average Infant Deaths.
Malaysians .. ..	12,743 (13,075)	118,256 (108,173)	1,062 (1,090)
Chinese .. ..	7,029 (6,199)	85,629 (83,830)	586 (517)
Indians and Pakistanis ..	2,785 (2,883)	26,680 (25,369)	232 (240)
Others .. ..	106 (144)	2,331 (2,140)	9 (12)

An analysis of the Infantile Mortality shows that an increase in the proportion of deaths has only occurred in the Chinese.

13. MATERNAL MORTALITY.—The total maternal deaths were 1,327 for 232,896 births, as compared with 1,172 for 219,512 births in 1950. This gave a maternal death-rate of 5.7 per 1,000 births, and the figure for 1950 was 5.3 per 1,000 births.

14. PRINCIPAL CAUSES OF DEATH.—Out of a total of 81,630 deaths only 19,513 (about 24 per cent.) have been certified by a medical man. It may, therefore, be expected that the classification is far from accurate. “Fever of unknown origin” accounts for 9,310 deaths. Malaria accounts for 912 deaths as compared with 1,011 deaths in 1950.



The other principal causes are given below: (1950 figures in brackets).

(a) Pulmonary Tuberculosis ... ..	2,873	(3,109)
(b) Pneumonia ... ..	2,703	(2,505)
(c) Premature Births ... ..	2,328	(2,159)
(d) Violence ... ..	3,667	(3,131)

## PUBLIC HEALTH—(2)—SPECIAL DISEASES.

15. The public health problems of the Federation of Malaya are the prevention of malaria, reduction of pulmonary tuberculosis, eradication of yaws, the control of conventional diseases and the treatment of leprosy and mental diseases. The prevention and the treatment of other common diseases, improvement of the general standard of nutrition and health and enforcement of quarantine constitute an equally important part of the Health Services.

16. **MALARIA.**—Malaria has shown a moderate increase in incidence. There is evidence of a rise towards the middle of the year and how much of this is a rise in the actual incidence of malaria is not easy to assess as there has been a certain amount of movement of individuals into towns because of resettlement changes.

It is well known that mass movement of population in tropical and sub-tropical areas is a potent factor in causing serious malarial epidemics. Although Malaya has been a leader in the control of malaria for the past few years, there is evidence now in some parts of the country of an increase in malaria transmission.

The number of malaria cases treated in Government hospitals was 18,325 with 353 deaths as compared with 14,559 and 328 deaths in 1950.

Experiments in malaria control by house spraying with insecticides in the villages of Negri Sembilan have now been in progress for two years. The results to date are good but undramatic. They give grounds for the hope that a twice yearly spraying may be a practical and effective way to control malaria in many parts of rural Malaya where *anopheles maculatus* is the only carrier. The experiments are to go on for another year. Control of other carriers appears less favourable but these are still being investigated.

17. **THE MALARIA ADVISORY BOARD.**—The constitution of the Board is as follows:

Six Permanent Members	The Director of Medical Services
(Medical)	( <i>Chairman</i> ).
	The Director, Institute for
	Medical Research ( <i>Vice Chair-</i>
	<i>man</i> ).
	The Senior Malaria Research
	Officer.
	The Entomologist, Institute for
	Medical Research.
	The Senior Medical Officer,
	Military Forces.
	The Principal Medical Officer,
	Royal Air Force.

Five Permanent Members representing Government Departments	Representing: Railways Public Works, Drainage and Irrigation, Education, Agriculture.
--	--

*Members nominated by His Excellency the High Commissioner.*

Five Medical Officers in the Public Service appointed by name	Government Medical Officers with experience of anti- malarial work.
---	---

Five Medical Practitioners not in the Public Service	These are all Estate Medical Practitioners with anti- malarial experience.
---	--

Two representatives of planting interests nomi- nated after consultation with the United Planting Association of Malaya	One Asian and one European planters' representative
---	--

One member nominated to represent labour interests.

Four other nominated members	(One is an Administrative Officer and three are medical men).
---------------------------------	---

The Secretary of the Board is either the Entomologist or the Malaria Research Officer, Institute for Medical Research.

In addition to members, the following guests were present at the meeting: Surgeon Commander G. H. G. Southwell-Sander, R.N., and Col. W. A. D. Drummond, C.B.E., A.D.M.S., Malaya District; Capt. C. E. Shearman, R.A.M.C., Singapore, Professor A. A. Sandosham, University of Malaya; Dr. R. Calderwood, Chief Health Officer, Singapore; Dr. J. F. B. Edeson, Malaria Research Officer, and Mr. R. H. Wharton, Entomologist, of the Tampin Branch of the Institute for Medical Research.

The Board held only one meeting on 11th August, 1951.

18. REVIEW OF LOCAL MALARIA.—For the first time since the Japanese occupation, hospital admissions for malaria showed an upward trend in 1951. The increase was evident in admissions both to Government hospitals and to estate hospitals, and was reported from eight of the eleven States and Settlements in the Federation. The total admissions were still well below the 1947 level, but were higher than in 1948, 1949 or 1950. Whether this increase is a temporary one or marks the end of a long period of unusually low malaria incidence has yet to be revealed.

The case mortality rate in Government hospitals was only 1.9 per cent., compared with 2.7 per cent. in 1950. Blackwater Fever remained rare.

19. CONTROL OF MALARIA ON ESTATES.—Dr. R. B. Wallace of Dublin Estate, Kedah, described the history of malaria control on that estate since 1926. Anti-larval measures such as drainage and oiling failed to control the annual malaria wave, nor was Paris Green any improvement on anti-malarial oil. Quinine



prophylaxis was also unsuccessful, and plasmoquine prophylaxis was little better; but atebrin (mepacrine) prophylaxis from 1933 onwards gave effective control of malaria for the first time, and anti-larval measures were stopped completely.

Since 1946, new insecticides and new synthetic anti-malarial drugs have been tested on various divisions of the estate. A number of residual insecticides, including DDT and BHC appeared effective against *Anopheles maculatus* in preliminary trials, but BHC failed to prevent the malaria wave when used alone on four divisions. For the conditions prevailing on this estate, it appears that drug suppression is the control method of choice, and mepacrine, proguanil, chloroquine and pentaquine, neopremaline and metoquine, have all been tried and found effective.

20. COMPARATIVE COSTS OF INSECTICIDES.—Mr. R. H. Wharton, Entomologist, Tampin, prepared a valuable review of the different preparations of insecticides available in Malaya, and tables of comparative costs when used as residual sprays in houses or as larvicides.

Home-made emulsions at prices then ruling were easily the cheapest form of insecticide, but required care in preparation. For residual house spraying, a home-made emulsion cost about one-half as much as DDT-kerosene solution, and was much less bulky to transport.

Emulsions were also the cheapest form of larvicide, and previous reports showed that they were efficient when properly used. The substitution of emulsions for malariol should reduce the cost of materials by at least ninety per cent. and possibly more, but labour costs would remain much the same.

21. PLAGUE AND CHOLERA.—No cases of plague or cholera were reported in 1951.

22. SMALLPOX.—There were two imported cases of smallpox, one from Sumatra and the other from Singapore. Adequate steps were taken to prevent any outbreak. Total number of vaccinations done during the year was 294,663.

23. SCARLET FEVER.—Two cases of scarlet fever were recorded, one in Pahang and the other in Penang.

24. TROPICAL TYPHUS.—This disease is still prevalent in the Federation of Malaya. Five hundred and twenty-seven cases were recorded during the year, out of which 414 were scrub typhus and 113 urban typhus. Selangor and Johore recorded the highest number of cases—130 and 105 respectively. Advances in chemoprophylaxis have resulted in reducing the case mortality. There were only 11 deaths—giving a case mortality rate of 2.1 per cent. as against 8.7 per cent. in 1947.

25. ENTERIC FEVER.—The number of cases of enteric fever reported was 1,064 with 136 deaths. The disease is endemic in Malaya. There was no major outbreak in any particular area but a minor outbreak occurred in Kuala Lumpur in September. The case mortality rate was 12.7 per cent. as against 21.3 per cent. in 1947.

26. DYSENTERY AND DIARRHŒA.—Dysentery and Diarrhœa are not notifiable. Hospital statistics show admissions as 7,185 with 957 deaths.



27. **DIPHTHERIA.**—There was an increase in the number of cases of diphtheria, there being 1,203 cases with 289 deaths. The corresponding figures for the year 1950 were 901 cases and 242 deaths. There was no outbreak in any particular area and the cases occurred sporadically. The case mortality rate was 13.3 per cent. as against 30.6 per cent. in 1947.

28. **CEREBRO-SPINAL MENINGITIS.**—Fifteen cases of cerebro-spinal meningitis were reported with five deaths.

29. **POLIOMYELITIS.**—There have been sporadic cases of poliomyelitis throughout the Federation with an increase in numbers. One hundred and ninety-nine cases were reported with 21 deaths as compared with 44 cases and three deaths in 1950.

The greatest number of cases recorded was in the State of Selangor with 49 cases and nine deaths and the highest number notified being 28 in March and 27 in May.

30. **YAWS.**—Yaws in Malaya is a disease which is common among the rural population, particularly Malays. Although the disease was on the increase especially on the East Coast after the war due to neglect during the occupation period, it has been brought under control with appropriate treatment by arsenical injections. It is still very common in places which are far away from the towns.

Thirty-five thousand seven hundred and eighteen cases of yaws were treated during the year as compared with 35,657 cases in 1950.

31. **PULMONARY TUBERCULOSIS.**—Tuberculosis is still the disease which continues to play a prominent part in the minds of the public. Voluntary public organisations and Government public health agencies have made valuable contributions and have aroused public interest in tuberculosis treatment and control.

The incidence of tuberculosis is decreasing slowly as judged by the figures for hospital admissions and deaths. Admissions to hospitals for pulmonary tuberculosis were 5,933 with 1,740 deaths as compared with 6,305 admissions and 1,767 deaths for the corresponding period last year. The total deaths registered with the Registrar-General, Births and Deaths were 2,873 for the year as compared with 3,109 in 1950.

Hospital facilities are being improved and the total number of beds for tuberculosis is now 2,768. Far too many of the beds continue to be occupied by advanced and hopeless cases. As they are sources of infection they are kept in hospital—a problem which causes concern in every hospital in the Federation.

The modern out-patient clinic with its own X-ray Department and laboratory in Malacca has proved its worth in dealing with an almost overwhelming number of cases. Pneumoperitoneum with or without phrenic paralysis continues to give good results.

32. The Tuberculosis Settlement at Pulau Jerejak has been extended to provide accommodation for 350 cases. When the repairs are completed it is expected to accommodate 600 patients. A wholetime medical officer is in charge of this tuberculosis settlement.

Fresh air, rest, hygiene and nourishing food form the main pillars on which the treatment is based. Patients are encouraged to lead an open air life. The better type of patients who are improving usually engage in hobbies such as fishing, painting, gardening, vegetable growing, tailoring, knitting and making of fishing nets.

The members of the British Red Cross Society visit the settlement once a month and instruct the patients in various handicrafts as diversional therapy.

33. The year 1951 will always be a landmark in the history of tuberculosis control in the Federation of Malaya, since it saw the commencement of the B.C.G. campaign. This method of control has been well received by the public and is now carried out in schools, infant welfare centres and maternity wards. This campaign increased in momentum during the latter part of the year and is now in full swing. Out of 249,181 persons who were tested with tuberculin 133,355 were vaccinated with B.C.G.

34. LEPROSY.—The undoubted efficacy of the new series of drugs in the treatment of leprosy is having a very obvious effect. A far greater number of people are now coming voluntarily for treatment and their subsequent rapid improvement and the sight of others around them has brought buoyancy to the Settlement. The total number of patients in the four settlements in the Federation is now 3,127.

A report of the work of the Leper Settlements is given in a later section (paras. 75-77).

35. VENEREAL DISEASES.—The incidence of venereal diseases is declining yearly. Treatment centres are available at all hospitals and out-patient clinics while a number of special clinics function in the larger centres of population. The efficacy of the sulpha drugs and penicillin has become widely known and they are regarded as a panacea for many ailments. The following figures indicate the number of new cases treated:

New Cases.	1950.	1951.
Syphilis ... ..	9,048	7,589
Gonorrhœa ... ..	5,079	4,758
Other V.D. ... ..	2,002	2,009
	<hr/>	<hr/>
Total ...	16,129	14,356
	<hr/>	<hr/>

The above figures show a considerable reduction as compared with the figures for 1950. Part of the reduction may be due to patients seeking treatment by private doctors and to self medication with "sulpha" drugs, but there is justification for the belief that there is a real decrease resulting from settling down to normal ways of living.

A detailed Return of Venereal Diseases treated in Government Hospitals and Clinics, showing diagnosis and distribution by race and sex is included in the Appendix (Table 12).



## PUBLIC HEALTH (3)—NUTRITION.

36. Since the retirement of the Senior Nutritional Research Officer no nutritional surveys have been done and the investigations have unfortunately had to be suspended.

Supplementary feeding of school children became the responsibility of the respective State or Settlement authorities. In some of the States school feeding schemes continue but in others this privilege was withdrawn.

## PUBLIC HEALTH (4)—ESTATES, MINES, RAILWAYS, QUARANTINE.

37. HEALTH ON ESTATES.—Progress continues to be made in health measures for estate labourers. The general health of labourers has improved. Many estates have made good progress in their rebuilding programmes, demolishing the old types of labourers' lines and replacing these by more modern structures on the lines laid down by the Labour Department. Unfortunately, in some instances, Communist activities have impeded operations, but generally speaking, these rebuilding programmes are progressing steadily, and it can be said that on the whole sanitary conditions on estates have been satisfactory.

38. ESTATE HOSPITALS.—The following table is a summary of the provision made by employers for the treatment of sick labourers and their dependants on estates:

States/Settlements.	No. of Estate Hospitals.	No. of Beds.	All Diseases.		Malaria.	
			Admissions.	Deaths.	Admfs- sions.	Deaths.
Kedah .. .. .	13	1,014	17,195	333	2,806	25
Perlis .. .. .	—	—	—	—	—	—
Penang and Wellesley .. .. .	3	195	770	13	23	—
Perak .. .. .	31	1,326	15,814	343	312	2
Selangor .. .. .	30	1,275	20,227	555	518	3
Negri Sembilan .. .. .	19	1,037	12,303	362	725	10
Malacca .. .. .	11	190	3,018	52	315	—
Johore .. .. .	15	528	6,558	99	352	2
Kelantan .. .. .	4	82	1,714	23	237	3
Trengganu .. .. .	1	40	1,016	14	340	1
Pahang .. .. .	4*	171	3,322	58	104	4
Total .. .. .	131	5,858	81,937	1,852	5,732	50

\* Includes one Sungai Lembing Mines Hospital.

The following table is a summary of the statistics relating to mortality amongst labourers on estates:

	Population.	All Diseases.		Malaria.	
		Deaths.	Death rate per mille.	Deaths.	Death rate per mille.
Labourers and Dependants—					
All nationalities .. .. .	414,664	3,653	8.81	100	.24
Labourers only—					
All nationalities .. .. .	258,953	1,292	4.99	30	.12
Labourers and Dependants—					
Indians .. .. .	249,177	2,642	10.60	56	.22
Labourers only—					
Indians .. .. .	144,244	844	5.85	14	.09

39. The low incidence of disease and the low mortality amongst labourers on estates is now taken as a matter of course. It is interesting to look back and examine the conditions that existed only 30 to 40 years ago. The table below shows the comparison:

#### ESTATE MORTALITY RATES.

F.M.S.	Total Number of Estate Labourers.		Deaths.	Death rate per mille.	
1911 ..	143,614	..	9,040	..	62.9
1912 ..	171,968	..	7,054	..	41.02
1913 ..	182,937	..	5,592	..	29.6
1914 ..	176,226	..	4,635	..	26.3
1915 ..	169,100	..	2,839	..	16.78
1918 ..	213,425	..	9,081	..	42.55
(Influenza Epidemic)					
1919 ..	216,573	..	3,384	..	16.16
1920 ..	235,156	..	4,367	..	18.57
1921 ..	175,649	..	3,195	..	18.19
F. of M.					
1949 ..	351,968	..	940	..	2.7
1950 ..	269,685	..	779	..	2.89
1951 ..	258,953	..	1,292	..	4.99

40. HEALTH ON MINES.—With the exception of Pahang Consolidated Mines there are no hospitals on mines and the labourers are sent to Government Hospitals for treatment.

41. RAILWAY SANITATION.—The health and medical work on the Malayan Railway is under the charge of a Medical Officer seconded from the Government Service. It provides medical facilities for railway staff and their dependants at places where medical department facilities are not readily available, namely at wayside stations and all gang lines.

The activities of this department were confined largely to anti-malarial works on the Railway Reserve and on State and private lands adjoining the Railway Reserve. Preventive measures adopted consist of oiling of drains by the spray and brush methods, disinsectisation of quarters with DDT and prophylactic treatment of staff and their dependants.

Thirteen Railway Dispensaries including those on major construction areas functioned during the year. First aid courses of instruction based on St. John Ambulance handbook were attended by 312 employees of whom 77 passed the examinations held on completion of the courses.

First Aid Boxes and stretchers are available on all passenger trains, workshops and at all stations and they are replenished as often as necessary.

#### PORT HEALTH WORK.

42. During the period from 1st January, 1951 to 31st December, 1951, 149 immigrant ships from India, 76 from China, 3 pilgrim ships from Jeddah and 122 from other infected ports arrived, carrying a total of 73,726 saloon and deck passengers.



No dangerous infectious diseases were detected among the passengers during routine examination of passengers on board.

*Outgoing Pilgrim Ships*—Three pilgrim ships carrying a total of 5,797 left the port of Penang during the period.

*Incoming Pilgrim Ships*—Three Pilgrim Ships carrying a total of 4,675 pilgrims arrived during the period. A total of 18 deaths occurred on these ships and the deaths were chiefly among the aged.

#### 43. SUMMARY OF PORT HEALTH WORK.—

Number of visits of inspection to ships.	Total Passengers.		Total Examined.		Passengers.		
	Cabin.	Deck.	Crew.	Pas-sengers.	U.	Q.	R.
Penang .. .. 350	14,240	59,486	.. 36,805	73,726	.. 9	2	33,936
Port Swettenham .. 160	2,359	10,745	.. 13,246	13,104	.. —	—	12,353
Total .. 510	16,599	70,231	.. 50,051	86,830	.. 9	2	46,289

U—Signed undertaking to report.

Q—Removed to Quarantine Station.

R—Remained in ship.

44. QUARANTINE STATION, PULAU JEREJAK.—The Quarantine Station was returned to the Medical Department on 1st October, 1951. During the period no passengers were sent for quarantine.

45. VACCINATIONS AND INOCULATIONS PERFORMED AT THE PORT HEALTH OFFICE.—During the period 13,884 vaccinations and 13,826 inoculations were performed. Out of the total number of vaccinations performed 277 were primary vaccinations and 13,607 were re-vaccinations for purposes of International Certificates (Medl. 41).

46. RAT EXAMINATIONS.—This had to cease after January, 1951 as the Municipal Health Department stopped the supply of rats. In January, 1951 only one rat was examined and no B. Pestis was found.

47. INSPECTION OF SHIPS.—Seventy-nine ships were inspected for rats for the purpose of issuing Deratisation Exemption Certificates. All except two were clean and certificates were issued.

48. INSPECTION OF AIRCRAFT.—A total of 186 planes were inspected during the year. Altogether a total of 864 crew and 1,149 passengers were examined but no case of dangerous infectious disease was detected among them.

### PART III.

#### MATERNITY AND CHILD WELFARE.

49. This is a State service, particulars of which will be found in the reports of individual States and Settlements.

In spite of activities by the terrorists new maternity and child welfare centres have been opened up in most of the States, but this expansion is limited by lack of personnel to staff the new

centres. The people are slowly becoming conscious of the value of these welfare centres, most of which are well attended and slowly the emphasis is passing from disease to maintenance of health.

The total number of women admitted to maternity wards in 1951 was 43,709 and the total number of deaths was 365. This compares with 38,814 admissions and 313 deaths in 1950. The attendances of mothers and children at the welfare centres amounted to 838,074 and 348,337 visits were paid to mothers and children in their homes.

A tabulated statement of child welfare centres is given in the Appendix—No. 13.

#### PART IV.

#### HOSPITALS AND DISPENSARIES.

50. There are seventy Government Hospitals in the Federation, not including the Special Institutions for Mental Diseases and Leprosy.

During the year 223,287 patients were admitted. This does not include the inmates of the Leper and Mental Institutions which numbered 613 and 1,975 respectively.

The general condition of the wards and equipment is now reasonably good in all the hospitals, but the shortage of trained personnel has resulted in the closure of wards in certain hospitals.

51. A summary of the distribution of hospitals and beds is given below. A tabular statement of hospitals with daily averages, admissions and deaths is given in the Appendix—Table No. 1A.

#### *Summary of Hospital Accommodation.*

State/Settlement.	Number and Category of Beds.					Total.
	General.	Obstetrics.	Tuber- culosis.	Infectious.	Mental.	
Kedah .. ..	720	78	207	15	19	1,039
Perlis .. ..	97	10	12	5	—	124
Penang and P. Wellesley	859	150	651	50	17	1,727
Perak .. ..	2,028	255	403	—	—	2,686
Selangor .. ..	1,346	173	246	29	14	1,808
Negri Sembilan .. ..	729	104	328	29	8	1,198
Malacca .. ..	366	79	337	49	6	837
Johore .. ..	1,460	260	367	50	82	2,219
Kelantan .. ..	309	29	43	—	35	416
Trengganu .. ..	208	20	40	8	26	302
Pahang .. ..	555	61	134	26	11	787
Total .. ..	8,677	1,219	2,768	261	218	13,143



Total excluding Special Institutions	...	...	...	13,143
Special Institutions:				
Leper Settlement, Sungei Buloh, Selangor	...	2,650		
„ „ Pulau Jerejak, Penang	...	500		
„ „ Johore Bahru	...	302		
Leper Camp, Kota Bahru, Kelantan	...	24	3,476	
				<hr/>
Mental Hospital, Tanjong Rambutan	...	...	3,000	
				<hr/>
Total—All Beds				19,619
				<hr/>

52. OUT-PATIENTS.—All Hospitals have out-patient departments. This is supplemented by small dispensaries situated in many of the smaller towns and by travelling motor dispensaries operating on the main roads. Hospital assistants in charge of fixed dispensaries travel by bicycle throughout their area to deal with places which the travelling dispensaries cannot reach. In Johore, Pahang, Perak and Kelantan a certain amount of travelling is also done by river.

The provision of medical facilities for re-settlement areas has been achieved by the utilisation of the service of the travelling dispensaries and by the erection of permanent dispensaries with resident staff.

Two million one hundred and fifty-nine thousand six hundred and eighty-four attendances at all dispensaries were recorded in 1951. This figure does not include attendances at Infant Welfare Centres and Venereal Disease Clinics. Six hundred and thirty-eight thousand three hundred and fifty of these attendances were at travelling dispensaries.

Details of the distribution of dispensaries and of the patients treated are given in the Appendix (Table No. 5).

#### NOTES ON CONDITIONS TREATED IN HOSPITALS, CLINICS AND DISPENSARIES.

53. Full details are given in Table 1 of the Appendix. The following gives an indication of the commoner conditions treated in hospital:

Diseases.	Admissions.	Deaths.	Mortality per cent.
Malaria .. .. .	18,325	353	1.92
Pulmonary Tuberculosis .. ..	5,933	1,740	29.33
Dysentery .. .. .	1,787	67	3.75
Diarrhoea and Enteritis .. ..	5,398	890	16.49
Pneumonia and Broncho-Pneumonia	4,475	1,333	29.79
Bronchitis .. .. .	9,703	129	1.33
Beri-beri .. .. .	676	59	8.73
Venereal Diseases .. .. .	3,415	70	2.05
Enteric Fever .. .. .	915	132	14.43
Injuries due to External Causes ..	23,255	866	3.72

54. RACIAL DISTRIBUTION OF HOSPITAL ADMISSIONS AND OF COMMON DISEASES.—The following statement gives an indication of the distribution of the common diseases in the three principal racial groups. This cannot be taken as a true indication of the racial distribution of disease. The proportion of Malays who are treated as in-patients in hospital is small in relation to the other races. The number of Indians is disproportionately high, because more Indians are employed by estates and the authorities insist on sending their employees to hospitals when necessary.

Races.	Malaysians.	Chinese.	Indians.	Others.
Population ..	2,631,154	2,043,971	586,371	75,726
Total admissions to hospital ..	53,974	94,109	71,386	6,406

  

Disease.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.
Malaria ..	7,312	41	5,332	231	5,240	72	441	9
Dysentery and Enteritis ..	1,693	84	2,791	627	2,499	240	202	6
Pulmonary Tuberculosis	1,167	151	3,619	1,219	1,067	347	80	23
Pneumonia ..	654	96	2,309	888	1,422	335	90	14
Beri-beri ..	130	6	364	42	178	11	4	—
Appendicitis ..	167	4	979	23	380	10	92	—

55. MALARIA CASES IN HOSPITALS.—The number of malaria cases treated in Government Hospitals was 18,325—an increase of 3,766 cases from 1950. The distribution of types of malaria, diagnosed microscopically was:

Sub-tertian	...	...	...	...	...	70.6 per cent.
Benign tertian	...	...	...	...	...	25.5 „ „
Mixed	...	...	...	...	...	3.3 „ „
Quartan	...	...	...	...	...	0.6 „ „

56. SURGICAL WORK.—Surgical operations, major and minor, totalled 43,353: details are given in the Appendix (Table No. 3).

57. OPHTHALMIC WORK.—Forty-four thousand four hundred and sixty-one patients were treated for diseases and injuries of the eye and 2,372 eye operations were performed.

Details are given in Table 4 of the appendix.

58. RADIOLOGICAL WORK.—Nearly all the more important district hospitals and all the larger hospitals now have efficient X-ray equipment.

Ninety-two thousand five hundred and fifty-three patients have been examined by X-ray and 2,978 patients treated in the X-ray and Electro-Therapeutic Departments.

59. VENEREAL DISEASES.—Cases treated as in-patients numbered 3,415 and 70 deaths in hospitals are recorded as due to venereal diseases: this includes 125 of congenital syphilis.

Further particulars are given in the section on Special Diseases (Para. 35) and in Table 12 of the Appendix.



## PART V.

## TRAINING OF NURSES.

60. The training of the local nurses has been based on the syllabus of the General Nursing Council of England and Wales.

Nurses and Hospital Assistants attend the same courses in basic subjects and arrangements are made for Hospital Assistants to attend demonstrations in laboratory methods to meet the requirements of their curriculum.

The Regional Training School in Penang serves the needs of the northern part of Malaya. This school has developed steadily and has reached the stage when it is ready to expand. Facilities for training nurses also exist in the larger hospitals of Johore Bahru, Malacca, Seremban, Kuala Lumpur and Ipoh.

There is still difficulty in recruiting nurses with the standard of education requested by the Nursing Board though more girls are finishing school. The major problem in recruitment is shortage of living accommodation.

An Assistant Nurses Scheme with a lower educational standard was introduced during the year. It is hoped that as a result work done in an haphazard fashion for patients by attendants will cease and the assistant nurses will take over the less responsible duties of the trained nurse.

The courses given in the Penang Regional Nursing Training School in 1951 comprised three Preliminary Courses with 64 pupils; three Block Courses with 119 pupils and post-graduate training for 15 nurses and 15 hospital assistants. The total numbers passing through the school were 119 nurses and 28 hospital assistants.

The Regional Training School at Kuala Lumpur accepted students from Selangor, Negri Sembilan and Pahang for training during the year. This comprised one Preliminary and three Block Courses with 72 students and of these 39 candidates were successful. In addition, two Post-Graduate Courses were held for 25 Staff Nurses.

Throughout the Federation 66 nurses passed their Final Examination in General Nursing in 1951.

## PART VI.

## DENTAL.

61. STAFF.—Four graduates of the University of Malaya were recruited as Dental House-Surgeons. They were posted to Penang, Alor Star, Ipoh and Johore Bahru.

One lady dental officer was recruited from Australia on a three-years contract and was posted to Malacca.

Of the six dental house-surgeons recruited in 1950, five elected to remain in Government Service on the termination of the period of housemanship.

Nine dental nurses completed their training at the Dental Nurses Training School, Penang, in June, 1951, and 11 qualified in December, 1951. Of the total of twenty, nineteen were posted to the States or Settlements of the Federation of Malaya, and one returned to Singapore.



NEW CLINICS.—Four new dental clinics were completed during the year. One at Ayer Itam, Penang, was part of a Health Centre. The remaining three at Taiping, Kajang and Seremban were designed purely as dental clinics.

A school clinic staffed by a dental nurse was opened in Batu Road School, Kuala Lumpur.

EQUIPMENT AND STORES.—A steady but small stream of heavy equipment was received from the Crown Agents during the year and it was possible to equip all new clinics and partially replace worn and unserviceable equipment in existing clinics.

The delivery of dental materials, drugs and small instruments was on a normal scale and it has been possible to build up a reserve of these items.

UNICEF supplied seventy "field sets" of dental equipment for the use of dental nurses when posted to States and Settlements. This was a very useful contribution.

62. SCHOLARSHIPS.—Two dental officers proceeded overseas to take up a course for the F.D.S.R.C.S. England in London.

Two dental nurses were sent to New Zealand for post-graduate study in teaching of dental nurses and of Dental Health Education.

The Chief Dental Officer, Federation of Malaya, was attached for four months to the Division of Dental Hygiene, New Zealand, during 1951.

63. GENERAL.—The steady expansion in the dental treatment of the school children of Malaya is satisfactory. The number of operators is still completely inadequate to the task but the position is improving.

The establishment of dental nurses in schools under the supervision of the dental officer of the district is proving by far the most effective line of treatment.

The limiting factor in the training of adequate numbers of dental nurses is accommodation. There is an urgent need for additional accommodation at the Dental Nurses Training School if the school dental service is to be made sufficiently large to cope with dental disease in the Malayan schools. Training facilities are cramped but improvisation can compensate to a certain degree but it is impossible to accept trainees without being able to house them.

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## PART VII.

### SPECIAL INSTITUTIONS.

64. INSTITUTE FOR MEDICAL RESEARCH.—The Institute for Medical Research in Kuala Lumpur is a Federal Institution. Maintained by the Governments of the Federation of Malaya and Singapore, it is broadly based for scientific investigations also on the collaborative support of research teams from other

countries, and on a technical liaison with research workers in various parts of the world. The staff is largely Malayan but the work of the laboratories is not restricted to Malayan Establishment, and during the year hospitality was extended to a group of workers from the U.S. Army Research and Graduate School, Washington, and to a British Team financed by the Colonial Research Council. Now, more than ever in the past, co-operation is the key-note of scientific enquiry, and it is pleasant to record the harmony and sense of common purpose which continue to govern the relations of the Institute staff with the Malayan Medical Services, and with their welcome guests from abroad.

The work of the year has a wide range. Research on antibiotics continues in the Division of Bacteriology and promising new diagnostic tests for smallpox and tuberculosis are being developed in the Division of Pathology. Studies of the nutritional anæmias and of effects on the food value of rice of the conditions of cultivation, are being made in the Division of Biochemistry; and the work of the Divisions of Entomology and Malaria on the use of residual sprays for the control of malaria is yielding slow but encouraging results. The British Typhus Research Team continues to investigate the role of animals and their ectoparasites in the spread of scrub typhus and other diseases, while an American Unit is extending the earlier work on immunity in scrub typhus and on the treatment of typhoid fever with combined chloramphenicol (chloromycetin) and cortisone. The discovery by American colleagues at the Institute that Japanese B virus is present in Malaya, and the indirect evidence assembled by Dr. S. R. Savor of the occurrence in Malaya of Q fever, is likely to separate two more infections from the dwindling miscellany of undiagnosed fevers.

65. BACTERIOLOGY.—The Senior Bacteriologist, Dr. R. Green, was acting Director of the Institute for most of the year, but was able to continue his studies of anti-biotic-producing moulds and bacteria from Malayan soils and other sources. At the request of Sir Howard Florey, promising strains were sent for further investigation to the new antibiotic plant established by the Medical Research Council near Bristol. Two organisms were of unusual interest: a strain of *streptomyces* isolated from the gut of a white ant produced a wide-range antibiotic which also restrained the growth of the filamentous fungus *Paecilomyces*, a useful activity, suggests Dr. Green, which might serve to keep the ants subterranean “fungus gardens” free from bacteria of filamentous fungi which might otherwise overgrow them; and a sporing bacillus from a wasp’s nest showed a remarkable proliferative activity in competition with pathogenic bacteria.

The bacteriological examination of Malayan waters has long been one of the responsibilities of the Division of Bacteriology. With some 35,000 examinations and much epidemiological experience over twenty years as a basis, Dr. Green draws conclusions in his report which have an important bearing on future policy in the control of Malayan water supplies.

66. BIOCHEMISTRY.—In the Division of Biochemistry continued studies on rice suggest that soil and growth conditions affect the mineral nutrients of the grain more than does the variety of strain. Attempts to prepare a parboiled rice which,



while retaining its nutritive value would be acceptable in colour and taste to people who usually eat white rice, have met with some success. The flavour and smell of the parboiled grain may be improved without loss of thiamin though the grain tends to break in milling: the yellow colour is more persistent and efforts to remove it by harmless bleaching agents have so far been unsuccessful. The cooking qualities of rice, too, are being studied. Some varieties yield discrete non-glutinous grains; others, like the "pulut" rice become soft and sticky. On the analogy of the "hard" and "soft" wheats the difference may be related to the amino-acid pattern of the rice protein, an assumption which is being studied by the methods of paper chromatography.

The anæmia survey of rural communities, begun in 1950, is nearly complete. The groups examined include Malay fishermen and smallholders, Indian and Chinese labourers, and aborigines. The degree of anæmia seems to be broadly related to the dietary pattern of the groups. The most severe forms of anæmia were found among the Indians and the Negrito-Senoi aborigines. Many treated cases responded well to the administration of iron, but the improvement did not last long, and permanent benefit, it seemed, would come only from rational feeding.

The assay of essential nutrients in foods, the determination of drug levels in the blood and tissues during experimental treatments, and estimations of the insecticides DDT and BHC on treated surfaces, continue to be an important activity of the Division of Biochemistry, often related, as Dr. Simpson shows in his report, to investigations in progress elsewhere.

67. ENTOMOLOGY.—The programme of experimental malaria control in Malay kampongs has continued, supported by a grant from the Colonial Development and Welfare Fund. House spraying with DDT and BHC (Gammexane), has much reduced the malaria and almost stopped the transmission of infection, but falls short of eradicating the insect vectors, *Anopheles maculatus*. Further observations in window-trap huts confirm that an application of DDT at 200 mgm/sq. foot, or BHC at 40 mgm gamma/sq. foot, is effective for six months. Such heavy deposits, at least of BHC, are seldom found necessary in other countries, but a reduced dosage of 100 mgm DDT, or 10 mgm gamma BHC, was active for about two months only. The results of house spraying have been good but undramatic. They are slow to appear but they seem to be sure. They show that malaria transmitted by *A. Maculatus* may be controlled in Malay villages by spraying the houses twice a year, at a cost of about \$2 for every person protected, and they point clearly to important developments in malaria control policy for many rural areas. *Anopheles maculatus* is the most dangerous malaria carrier in Malaya and it is fortunate that this mosquito is comparatively sensitive to DDT. But other Malayan vectors, *A. sundaicus* and *A. letifer*, for example, are less susceptible and we have yet to show that the coastal malaria for which these mosquitoes are responsible will yield so readily to DDT as the malaria transmitted by *A. maculatus* in the inland plains and foothills.



Practical methods of using DDT as a larvicide in flowing water are being studied. A suitable emulsion has been devised and a low volume sprayer for applying solutions in oil is now available for general use. Comparative experiments suggest that BHC has no advantage over DDT as a larvicide, but early trials with the new insecticide Dieldrin are more promising.

Observations on the feeding and resting habits of adult mosquitoes have been extended to include the malaria vectors of the coastal plains *A. barbirostris* (dark winged) *A. letifer*, and *A. sundaicus*. An account of the systematics and biology of the *hyrcanus* group of *Anopheles* is complete and awaits publication. Filariasis problems are being investigated as time permits and a search is being made for the vector of the malaria parasite which infects Malayan squirrels.

68. MALARIA.—What is the best way to treat acute malaria? How may the disease best be prevented in the *kampongs* of the Malays. Much of the work of the Division of Malaria Research was directed to these continuing problems. Nearly six hundred cases of malaria were treated experimentally, with results which Dr. Wilson reveals in his report. The failure of Paludrine when used alone in acute *falciparum* infection was again emphasised, while in contrast was the efficient clinical response to single doses of Resochin, Nivaquine and Camoquin. The new drug Daraprim, was less active than had been expected from preliminary trials elsewhere in bird malaria.

Resistance to proguanil, hitherto found in Malaya only in *falciparum* malaria, has now appeared in *vivax* infection. We may have to recognise, it seems, that the schizonticidal activity of this valuable drug is a dwindling asset, though its dominant place as a non-toxic gametocide and true causal prophylactic is still unchallenged. Towards the end of the year senior officers of the Army and of the Institute were able to discuss the problem of proguanil resistance with Sir Neil Hamilton Fairley, whose suggestion of a new experimental approach by a research group in Kenya is now being considered. Arising from this discussion is the possibility that resisting Malayan strains of *P. falciparum* may be examined afresh in human volunteers.

*Kampong* malaria remains the most difficult outstanding malaria problem in Malaya. Experimental control has continued in the Inas, Nuri and Terachi Valleys of Negri Sembilan and Dr. Wilson is now able to summarise the effects of two years work on the malaria situation. The houses of the Malays were sprayed with DDT or BHC (Gammexane) in two of the valleys, and suppressive proguanil was used in a third. The mosquito carrier was *A. maculatus*. The results are undramatic, but the steady recession of the malaria is encouraging. Proguanil given to the villagers once a week was quicker to take effect, but the hopes of the future are likely to be centered more on DDT.

69. NUTRITION.—The Division of Nutrition, working with the Department of Fisheries, has continued the dietary and economic surveys started last year among the fisherfolk of *Kampong Kuala Muda* in Province Wellesley. The study of the effects of adding "Premix" to the diet of Malacca school children was suspended in June after eighteen months observation: no clearly demonstrable improvement was seen in



heights and weights or in the incidence of certain clinical evidences of dietary deficiency. The Division received a heavy setback in August with the departure from Malaya of Dr. R. C. Burgess, Senior Nutrition Officer, who was appointed Adviser on Nutrition to the World Health Organisation.

70. PATHOLOGY.—Two promising diagnostic tests are being studied by Dr. Savor in the Division of Pathology. A serological test for smallpox, developed in 1949, remained essentially unassessed until a few months ago when some confirmation of its value was possible in two cases of smallpox, while the clinical value of a hæmagglutination test for tuberculosis is under trial. Material from man and animals is being collected to determine whether "Q" fever is present in Malaya, part of a world-wide survey sponsored by the World Health Organisation. This mild typhus-like fever, caused by *Rickettsia (Coxiella) burneti*, after Burnet who first described its occurrence in Australia, is now known in many parts of the world. Complement-fixation tests on 500 sera from man and animals in Malaya suggest that the infection is present, unrecognised among the miscellany of undiagnosed fevers. At the Ipoh branch of the Institute studies on rapid culture methods for the diagnosis of tuberculosis are being continued.

The characters and racial distribution of the so-called mixed salivary tumour in Malaya are being studied by Dr. Marsden. This growth, common among Malays and Chinese, often arises from the sub-maxillary salivary glands, a site of preference unusual among Europeans.

71. FILARIASIS ENQUIRY.—The distribution of filariasis throughout Malaya, the complex patterns of transmission, the clinical features of *W. malayi* infection, the efficiency and permanence of treatment the possibilities of control by mass treatment or by DDT spraying of houses, are still but imperfectly known. Systematic studies are planned to begin in 1953 with the formation of a filariasis research team from the staff of the Divisions of Entomology and Malaria. Meanwhile, information is slowly accumulating. A survey of the Balik Pulau area of Penang Island in August revealed heavy infection: more than one-tenth of three hundred persons examined had elephantiasis and nearly one-third were infected. Hetrazan treatment has been continued in the Sungei Patani Government Hospital by members of the Kedah Medical Department; and many mosquitoes caught in filariasis areas of Kedah and Province Wellesley have been dissected. Over the area as a whole the main vectors seem to be three species of *Mansonia*, the dark-winged form of *A. barbirostris* and one form of *A. hyrcanus*, but their relative importance varies in different parts of the area.

72. COLONIAL OFFICE RESEARCH UNIT.—The work in Malaya of the typhus research team, supported by the Colonial Research Council and attached to the Institute since 1947, is to be extended until the end of 1953. The emphasis on scrub typhus becomes less emphatic as the Unit approaches the wider field of animal and insect-borne disease, a trend which suggests that the name "Medical Ecology Research Unit" might be more appropriate.



Throughout the year the Unit has continued to investigate the conditions under which scrub typhus and other diseases may spread in nature. A total of nearly 17,000 animals and their parasites has been studied; all published records of mites and hosts have been collated, while three years' data on the reproduction of rats have been analysed. How deforestation and cultivation encourages rats is stressed while the reproduction of the three Malayan forms of *Rattus-rattus* is shown to be related particularly to habitat, the most important form being the rice-field rat, about which a deal of new information has been collected.

The Unit is collaborating with colleagues in the Queensland Institute for Medical Research, the South Australian Museum, the Sarawak Museum and the Duke University, U.S.A.; but the closest collaboration has been with the U.S. Army Unit in Malaya in studies on the vector mites of jungle scrub typhus and of leptospirosis. A U.S. research expedition to North Borneo in July received some support from the Unit, and one officer spent two weeks at Mount Kinabalu. This expedition, led by Lt. Col. Traub, produced much useful information. Vector mites of scrub typhus were found in abundance and there is little doubt that opening up this country will reveal a good deal of infection. Plans are under discussion for further collaborative work with the U.S. team on this and allied problems.

73. U.S. ARMY RESEARCH UNIT.—A fourth medical research team from the U.S. Army Research and Graduate School, Washington, arrived in Malaya in June and left in December. This team, led by Lt. Colonel Robert Traub, continued the earlier studies of the problems of immunity on scrub typhus with the possible goal of an effective method of immunisation: the results seem to be hopeful but the existence of several antigenically-distinct strains of *Rickettsia* complicates the problem. The trials of combined Chloromycetin-Cortisone therapy in typhoid fever started last year, received fresh impetus from an outbreak of this disease in Kuala Lumpur towards the end of the year. Field studies have included the collection of strains of *Leptospira*. By using a new complement-fixation test the team hopes to throw light on the epidemiology of the disease, where it occurs and what strains of the organism are involved. The team's expedition to Mount Kinabalu in North Borneo in August yielded useful collections of mammals and their ectoparasites which are still to be sorted.

The presence in Malaya of Japanese B encephalitis, suspected for several years, was proved by the Team on the eve of their departure for the States in December. This arresting discovery has implications which are still to be explored. Elsewhere in the Orient this serious infection is mosquito-borne, and much work lies ahead on the transmission of the disease in Malaya and on the possible animal reservoirs of the virus.

74. ROUTINE.—The Institute maintains a diagnostic service for the Federation of Malaya and prepares some of the more important biological products. More than two million doses of vaccine lymph were prepared during the year, mostly for issue



throughout the Federation and to Singapore, Borneo and other territories: nearly one million doses were supplied to the Government of Burma. The demand for typhoid vaccine by the Health Department and the Security Forces remains high; and the persistence of rabies in northern Malaya has entailed the preparation of much protective vaccine and the examination of many suspected dogs for infection. Yellow fever vaccine is maintained at the Institute and the potency controlled by routine tests on mice, a necessary precaution against the possible entry of this disease into Malaya. More than 3,000 mice, rats, rabbits and guinea-pigs, bred in the animal house of the Institute, have been supplied to the laboratories or to outside institutions, a routine activity from which Miss Cheek has been able to collect interesting data on the breeding of monogamous paired mice. Some 70,000 examinations, bacteriological, biochemical, histological, serological, etc., were made for the Medical Services and private practitioners of the Federation.

The B.C.G. campaign in Malaya, controlled by the Medical Department, is now under way. The Division of Bacteriology, having agreed to dilute, bottle and distribute Copenhagen tuberculin for the preliminary diagnostic tests, issued during the year enough diluted tuberculin for some three quarters of a million tests.

#### LEPER SETTLEMENTS.

75. There are four Settlements in the Federation—Sungei Buloh in Selangor, Pulau Jerejak in Penang, Leper Settlement, Johore Bahru and the Leper Camp, Kota Bahru, Kelantan.

76. LEPER SETTLEMENT, SUNGEI BULOH.—During the year the number of patients in the Settlement increased from 2,222 to 2,311: the distribution of the population is as follows:

Nationalities.	Men.	Women.	Boys.	Girls.	Healthy Infants.	Total.
Chinese .. ..	1,095 ..	529 ..	107 ..	60 ..	16 ..	1,807
Indians .. ..	206 ..	22 ..	10 ..	4 ..	— ..	242
Malays .. ..	189 ..	43 ..	10 ..	4 ..	2 ..	248
Others .. ..	11 ..	2 ..	1 ..	— ..	— ..	14
Total .. ..	1,501 ..	596 ..	128 ..	68 ..	18 ..	2,311

There was considerable Communist activity in the immediate neighbourhood during the early part of the year which interfered with the normal routine.

*Treatment.*—Sulphone in oil is still the drug of choice and work is proceeding to find whether it will work—either in combination, or alternating with thiosemicarbasones. There is, of course, always the possibility of mycobacterium lepræ developing a resistance to one or the other; alternations and combinations are, therefore, being introduced in order to combat this.

*Research.*—A well equipped laboratory has been created and investigations so far have been linked with the assessment of the efficacy of therapeutics. This work is being carried out by Dr. F. S. Airey of the Colonial Research Service. The laboratory



is now capable of much more detailed and wider research. Photographic work is carried out here and will, in time, extend to cover all new admissions.

*Welfare.*—A new venture has been started of exporting groups for labour to the Forest Research Station. These groups are collected and returned daily in time for their treatment. This enables them to earn more money than they would inside, since employment within the Settlement is necessarily limited. It is hoped to extend this idea. The majority of the inmates are either employed by Government in the maintenance of the Settlement or find their own employment as shopkeepers, farmers or carpenters within the Settlement.

*Hospital.*—There were 1,711 admissions to hospital for treatment. The main cause of death apart from the leprosy factor was pulmonary tuberculosis which accounted for eight deaths out of a total of 35. During the year, 37 babies were born; one was still-born, one died at birth and the remainder are thriving in the "Babies Home".

The number of discharges is steadily increasing and during the period under review 326 cases were discharged as arrested cases from the Leper Settlement, Sungei Buloh.

77. **LEPER SETTLEMENT, PULAU JEREJAK, PENANG.**—The Leper Settlement, Pulau Jerejak, is situated at the west side of the Penang Island. The nearest point of access to Penang is about two miles from Sungei Nibong. No visitors are allowed except by permit. All non-infectious cases are occasionally granted permission to visit their relatives.

The population of the leper settlement was 372 at the end of the year. There were 29 married couples and a special hut is reserved for pregnant cases who are given extra diets during the last two months. Babies born on the island, after the usual toilet, are immediately sent over to the Maternity Hospital, Penang, from where after six months they are transferred to the Social Welfare Department Orphanage.

Each community has its own club room for its social activities. The discipline on the island is excellent.

78. **MENTAL HOSPITALS.**—The military authorities who occupied the Mental Hospital, Tampoi, Johore Bahru, vacated the building sometime at the end of the year. Rehabilitation work has already started and admissions of mental patients will commence as soon as the institution is ready for occupation.

79. The Central Mental Hospital at Tanjong Rambutan deals with all cases of mental disease from the Federation of Malaya.

The admissions during the year were 1,975 as compared with 2,208 in the previous year. There were 1,416 discharges of whom 850 were graded as recovered, 397 as relieved and 169 as not improved. Deaths numbered 306 with a death rate of 6.05 per cent. of the 5,056 patients treated.

Deep insulin and electric convulsive therapy continued to be used with satisfactory results.

## CENTRAL MENTAL HOSPITAL, TANJONG RAMBUTAN.

## RETURN OF INMATES FOR THE YEAR, 1951.

*Summary of Nationalities.*

—	Remaining at end of December, 1950.	Admissions.	Deaths.	Total treated.	Remaining at end of December, 1951.
Europeans ..	—	7	—	7	—
Eurasians ..	16	5	—	21	15
Chinese ..	1,910	1,132	211	3,042	2,109
Indians ..	411	426	34	837	426
Malays ..	735	400	61	1,135	765
Japanese ..	1	—	—	1	1
Others ..	8	5	—	13	10
Total ..	3,081	1,975	306	5,056	3,326

*Summary by Sexes.*

Men ..	2,033	1,332	229	3,365	2,147
Women ..	1,027	623	75	1,650	1,141
Children :					
(1-10 yrs.) ..	21	20	2	41	38
Infants :					
(under 1 yr.)	—	—	—	—	—
Total ..	3,081	1,975	306	5,056	3,326

Daily average number of inmates for 1951—3,172.

Number of beds—3,000.

80. The cost of maintaining the Mental Hospital is indicated below :

(i) Personal Emoluments	...	...	\$811,910.27
(ii) Clerical Service	...	...	15,515.00
(iii) Other Charges, Annually Recurrent			911,861.88
(iv) Other Charges, Special Expenditure			25,505.79
(v) Miscellaneous Services	...	...	492.85
Total	...		\$1,765,285.79

Capital expenditure, pension and leave charges are not included. The nett maintenance cost is \$556.52 per annum per patient treated.

Farms.—The number of patients working in the farms at the end of the year was 289 as compared with 278 in 1950. The pig farms are progressing steadily and supplying increasing amounts of pork.



81. GOVERNMENT MEDICAL STORES.—The removal of the Medical Stores from Circular Road and the Equipment Store from Tanglin to the new buildings at the General Hospital, Kuala Lumpur commenced on 1st August, 1951. The arrangement of the new stores has increased the efficiency of the turn over of medical supplies to meet the increasing demands of the Medical Services.

82. PHARMACEUTICAL LABORATORY.—Equipment received during the year included a Glass Electrode  $p^H$  Meter and a Silverson Emulsifier. Routine chemical examinations and drug essays were carried out.

Over 183,759 ampoules were made as compared with 143,000 in 1950 and 62,221 pounds of galenicals and other preparations as compared with 56,319 in 1950.

The production of sulphone preparations for the treatment of leprosy was 287,232 doses and 617,936 of other preparations for injections were produced.

83. ORTHOPÆDIC APPLIANCE CENTRE.—Though of recent development, the Centre has been kept busy throughout the year with demands coming in from the Federation, Singapore, Siam and the Far East Forces.

This Centre is now housed in the new building which was opened by the late Sir Henry Gurney on 12th January, 1951.

The volume of work has far exceeded the capacity of the present staff and equipment. Although this Centre is expensive to operate it has made it possible for many disabled persons to be rehabilitated and resume employment, in some cases their previous employment and, in many cases, with training, they have been able to take up employment of light manual type and have become once again useful citizens to the community.

#### CONCLUSION.

84. The year 1951 marked a revolutionary change in the rural areas. Resettlement of squatters had created an additional responsibility on the staff of the Medical Services. Proper methods of disposal of both nightsoil and refuse, efficient drainage and the important item of water supply was successfully tackled. Permanent anti-malarial measures were also embodied in the general planning.

It is encouraging to see that most of the future camps will be provided with community centres, schools, places of worship, playgrounds and other essential public amenities.

Although Malaya has been fortunate in recording a low incidence of malaria since the end of the war, there is significant increase in some parts of the Federation. This increase may be due either to mass movement of population on account of resettlement of squatters or more probably to increased security work in malarial areas.

A feature of the period under review was the steady rise in the amount of work demanded by the various branches of this Department with the coincident steady fall in the availability of trained staff.

TABLE 1.

## IN-PATIENTS.

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951.

(All Hospitals including Special Institutions.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admils- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
I.—INFECTIVE AND PARASITIC DISEASES.							
A 1	001-008	Tuberculosis of respiratory system ..	2,455	5,933	8,388	1,740	2,640
A 2	010	Tuberculosis of meninges and central nervous system ..	10	223	233	154	7
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands ..	4	65	69	18	4
A 4	012-013	Tuberculosis of bones and joints ..	123	329	457	23	95
A 5	(a) 014	Tuberculosis of skin and subcutaneous cellular tissue ..	3	27	30	..	1
	(b) 015	Tuberculosis of lymphatic system ..	21	136	157	6	16
	(c) 016	Tuberculosis of genito-urinary system ..	..	20	20	3	..
	(d) 017	Tuberculosis of adrenal glands ..	..	2	2	..	..
	(e) 018	Tuberculosis of other organs ..	2	28	30	4	2
	(f) 019	Disseminated tuberculosis ..	..	20	20	9	..
A 6	020	Congenital syphilis ..	5	125	130	37	6
A 7	(a) 021.0-021.1	Primary syphilis ..	9	272	281	1	4
	(b) 021.2	Secondary syphilis ..	48	784	832	1	46
	(c) 021.3	Early syphilis, relapse following treatment ..	..	..	..	..	..
	(d) 021.4	Early syphilis (unspecified stage) ..	..	..	..	..	..
A 8	024	Tabes dorsalis ..	..	..	..	..	..
A 9	025	General paralysis of insane ..	1	11	12	3	..
A 10	(a) 022	Aneurysm of aorta ..	1	14	15	5	2
	(b) 023	Other cardiovascular syphilis ..	..	..	..	..	..
	(c) 026	Other syphilis of central nervous system ..	2	19	21	2	3
	(d) 027	Tertiary syphilis ..	25	275	300	8	16
	(e) 028	Latent syphilis ..	..	..	..	..	..
	(f) 029	Syphilis unqualified ..	21	347	368	11	14
A 11	(a) 030	Acute or unspecified gonorrhoea ..	..	..	..	..	..
	(b) 031	Chronic gonococcal infection of genito-urinary system ..	18	867	885	..	15
	(c) 032	Gonococcal infection of joint ..	7	101	108	..	..
	(d) 033	Gonococcal infection of eye ..	2	50	52	..	2
	(e) 034-035	Gonococcal infection of other sites ..	..	53	53	1	1
A 12	040	Typhoid fever ..	67	915	982	132	52
A 13	(a) 041	Paratyphoid fever A, B or C ..	1	36	37	4	2
	(b) 042	Other salmonella infections ..	1	13	14	..	..
A 14	043	Cholera ..	..	..	..	..	..
A 15	044	Brucellosis (undulant fever) ..	..	1	1	..	..
A 16	(a) 045	Bacillary dysentery ..	5	186	191	15	9
	(b) 046	Amoebiasis ..	35	1,154	1,189	39	39
	(c) 047-048	Other protozoal and unspecified forms of dysentery ..	8	447	455	13	9
A 17	050	Scarlet fever ..	..	1	1	..	..
A 18	051	Streptococcal sore throat ..	..	..	..	..	..
A 19	052	Erysipelas ..	..	32	32	2	..
A 20	053	Septicaemia and pyaemia ..	2	131	133	75	5
A 21	055	Diphtheria ..	26	1,065	1,091	289	25
A 22	056	Whooping Cough ..	18	241	259	15	2
A 23	057	Meningococcal infections ..	1	18	19	10	..
A 24	058	Plague ..	..	..	..	..	..
A 25	060	Leprosy ..	3,080	746	3,826	69	3,152
A 26	(a) 061	Tetanus of the new-born ..	3	183	186	154	3
	(b) —	Tetanus, other forms ..	3	219	222	112	4
A 27	062	Anthrax ..	..	..	..	..	..
A 28	080	Acute Poliomyelitis ..	4	179	183	21	6
A 29	082	Acute infectious encephalitis ..	..	4	4	1	..
A 30	081	Late effects of acute poliomyelitis and acute infectious encephalitis ..	..	..	..	..	..
	083		..	..	..	..	..
A 31	084	Smallpox ..	..	2	2	..	..
A 32	085	Measles ..	6	1,294	1,300	2	19
A 33	091	Yellow fever ..	..	..	..	..	..
A 34	092	Infectious hepatitis ..	14	650	664	39	31
A 35	094	Rabies ..	..	5	5	3	..
A 36	(a) 100	Louse-borne epidemic typhus ..	..	..	..	..	..
	(b) 101	Flea-borne endemic typhus (murine) ..	..	104	104	..	1
	(c) 104	Tick-borne epidemic typhus ..	..	..	..	..	..
	(d) 105	Mite-borne typhus ..	13	358	371	11	13
	(e) 102-103 } 106-108 }	Other and unspecified typhus ..	..	1	1	..	..
Carried forward ..			6,049	17,686	23,735	3,032	6,246



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	6,049	17,686	23,735	3,032	6,246
		<b>I.—INFECTIVE AND PARASITIC DISEASES—(cont.)</b>					
A 37	(a) 110	Vivax malaria (benign tertian) ..	37	2,417	2,454	24	48
	(b) 111	Malariae malaria (quartan) ..	7	63	70	1	
	(c) 112	Falciparum malaria (malignant tertian) ..	68	7,537	7,605	162	103
	(d) 114	Mixed malaria infections ..	..	359	359	9	4
	(e) 115	Blackwater fever ..	..	5	5	2	
	(f) 113	Other and unspecified forms of malaria ..	157	7,949	8,106	157	133
	116-117 }						
A 38	(a) 123.0	Schistosomiasis vesical (S. haema- tobium) ..					
	(b) 123.1	Schistosomiasis intestinal (S. Mansoni) ..					
	(c) 123.2	Schistosomiasis Pulmonary (S. japo- nium) ..					
	(d) 123.3	Other and unspecified Schistosomiasis ..					
A 39	125	Hydatid disease ..	..	3	3		
A 40	(a) 127	Onchocerciasis ..	..				
	(b) —	Loiasis ..	..				
	(c) —	Filariasis (bancrofti) ..	4	155	159	..	6
	(d) —	Other filariasis ..	..				
A 41	129	Ankylostomiasis ..	46	1,835	1,881	3	29
A 42	(a) 126	Tape worm (infestation) and other cestode infestation ..	..	7	7		
	(b) 130.0	Ascariasis ..	56	3,236	3,292	8	50
	(c) 130.3	Guinea worm (draeunculosis) ..	..				
	(d) 124	Other trematode infestation ..	..	1	1		
	(e) 128	Trichiniasis ..	..				
A 43	(f) 130.1-130.2	Other diseases due to helminths ..	1	201	202	3	2
	(a) 036	Chaneroid ..	6	194	200	..	3
	(b) 037	Lymphogranuloma venereum ..	1	213	214	..	8
	(c) 038	Granuloma inguinale, venereal ..	..				
	(d) 039	Other and unspecified venereal diseases ..	2	90	92	1	2
	(e) 049	Food poisoning infection and intoxi- cation ..	..	78	78	1	
	(f) 059	Tularaemia ..	..				
	(g) 063	Gas gangrene ..	..	2	2		
	(h) 064	(a) Glanders ..	..				
		(b) Melioidosis ..	..				
		(c) Other bacterial diseases ..	..	6	6		
	(i) 070	Vincent's infection ..	..	1	1		
	(j) 071	Relapsing fever ..	..	1	1		
	(k) 072	Leptospirosis icterohaemorrhagica (Weil's disease) ..	2	20	22	3	
	(l) 073	Yaws ..	61	746	807	..	84
	(m) 086	Rubella ..	..	7	7		
	(n) 087	Chickenpox ..	32	676	708	..	5
	(o) 088	Herpes Zoster ..	3	176	179	..	6
	(p) 089	Mumps ..	..	123	123	..	17
	(q) 090	Dengue ..	..	82	82		
	(r) 093	Glandular fever ..	..	16	16	..	1
	(s) 095	Trachoma ..	16	105	121	..	3
	(t) 096.7	Sandfly fever ..	..				
	(u) 120	Leishmaniasis ..	..	5	5		
	(v) 121	(a) Trypanosomiasis gambiensis ..	..				
		(b) Trypanosomiasis rhodesiensis ..	..				
		(c) Other and unspecified trypano- somiasis ..	..				
	(w) 131	Dermatophytosis ..	..				
	(x) 135	Scabies ..	27	1,311	1,338	..	25
	(y) 054, 074 }						
	096.1-096.6 }						
	096.8, 096.9 }	All other diseases classified as infective and parasitic ..	6	209	215	9	8
	122 }						
	132-134 }						
	136-138 }						
		<b>II.—NEOPLASMS.</b>					
A 44	140-148	Malignant neoplasm of buccal cavity and pharynx ..	6	184	190	45	5
A 45	150	Malignant neoplasm of oesophagus ..	1	59	60	19	3
A 46	151	Malignant neoplasm of stomach ..	6	190	196	100	6
		<i>Carried forward</i> ..	6,594	45,948	52,542	3,579	6,797



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter-mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain-ing at end of 31st Dec., 1950.	Admis-sions.	Total cases treated.	Deaths.	Remain-ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	6,594	45,948	52,542	3,579	6,797
		II.—NEOPLASMS—(cont.)					
A 47	(a) 152	Malignant neoplasm of small intestine, including duodenum ..					
	(b) 153	Malignant neoplasm of large intestine, except rectum ..		36	36	17	1
A 48	154	Malignant neoplasm of rectum ..		42	42	12	2
A 49	161	Malignant neoplasm of larynx ..	1	8	9	5	
A 50	162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary ..		44	44	19	1
A 51	170	Malignant neoplasm of breast ..	4	76	80	11	4
A 52	171	Malignant neoplasm of cervix uteri ..		110	110	20	2
A 53	172-174	Malignant neoplasm of other and un-specified parts of uterus ..					
A 54	177	Malignant neoplasm of prostate ..					
A 55	190-191	Malignant neoplasm of skin ..	7	82	89	10	7
A 56	196-197	Malignant neoplasm of bone and connective tissue ..					
A 57	(a) 155-156	Malignant neoplasm of liver ..	5	171	176	73	9
	(b) 157	Malignant neoplasm of pancreas ..		11	11	6	
	(c) 158	Malignant neoplasm of peritoneum ..		5	5	4	
	(d) 159	Malignant neoplasm of unspecified digestive organs ..	1	40	41	13	
	(e) 175-176	Malignant neoplasm of other and un-specified female genital organs ..	7	135	142	16	2
	(f) 178-179	Malignant neoplasm of other and un-specified male genital organs ..		51	51	8	4
	(g) 180-181	Malignant neoplasm of kidney, bladder and other urinary organs ..		28	28	6	1
	(h) 160	Malignant neoplasm of all other and unspecified sites ..					
	164-165						
	192-195		9	160	169	46	9
	198-199						
A 58	204	Leukaemia and Aleukaemia ..	2	34	36	13	1
A 59	(a) 200	Lymphosarcoma and reticulosarcoma ..					
	(b) 201	Hodgkin's disease ..		8	8	1	
	(c) 202-203	Other neoplasm of lymphatic and haematopoietic system ..					
A 60	(a) 210-211	Benign neoplasm of buccal cavity, pharynx and digestive system ..					
	(b) 217	Benign neoplasm of other female genital organs ..		68	68		2
	(c) 218	Benign neoplasm of other male genital organs ..					
	(d) 212-216	Benign neoplasm of other and un-specified organs and tissue ..					
	219-229		10	291	301	7	12
	(e) 230	Neoplasm of unspecified nature of digestive organs ..					
	(f) 233-235	Neoplasm of unspecified nature of other female genital organs ..		23	23		1
	(g) 231-232	Neoplasm of unspecified nature of other unspecified organs ..					
	236-239		7	164	171	12	7
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES					
		AND					
		IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.					
A 61	250-251	Nontoxic goitre ..	3	66	69	1	7
A 62	252	Thyrototoxicosis with or without goitre ..	2	14	16	2	2
A 63	260	Diabetes mellitus ..	41	643	684	41	44
A 64	(a) 280	Beri Beri ..	24	676	700	59	51
	(b) 281	Pellagra ..		34	34		
		<i>Carried forward</i> ..	6,717	48,968	55,685	3,981	6,966

TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	6,717	48,968	55,685	3,931	6,966
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES					
		AND					
		IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS —(cont.)					
	(c) 282	Scurvy .. .. .	..	2	2		
	(d) 283-284	Rickets .. .. .	1	30	31	6	1
	(e) 285	Osteomalacia .. .. .					
	(f) 286.0	(a) Sprue .. .. .	4	22	26	5	1
	286.5	(b) Malnutrition .. .. .					
	286.1-286.4 } 286.6 }	(c) Other deficiency states ..	8	457	465	31	17
A 65	(a) 290	Pernicious and other hyperchromic anaemias .. .. .	1	193	194	13	12
	(b) 291	Iron deficiency anaemias (hypo- chromic) .. .. .	162	2,266	2,428	133	197
	(c) 292-293	Other specified and unspecified anaemias .. .. .	79	1,406	1,485	91	47
A 66	(a) 241	Asthma .. .. .	95	2,626	2,721	50	87
	(b) 240	Angioneurotic oedema, urticaria and other allergic disorders .. ..					
	242-245 } (c) 253	Myxoedema and cretinism .. ..		5	5		
	(d) 254	Other diseases of thyroid gland ..	5	114	119	4	8
	(e) 270	Disorders of pancreatic internal secretion other than diabetes mellitus .. .. .					
	(f) 271	Diseases of parathyroid gland ..	1	8	9	1	
	(g) 272	Diseases of pituitary gland .. ..	1		1		
	(h) 273	Diseases of thymus gland .. .. .					
	(i) 274	Diseases of adrenal gland .. .. .		8	8		1
	(j) 275-277	Other diseases of endocrine glands ..					
	(k) 288	Gout .. .. .		14	14		2
	(l) 287, 289	Other metabolic diseases .. .. .	12	167	179	14	13
	(m) 294	Polycythemia .. .. .					
	(n) 295	Haemophilia .. .. .		5	5	1	
	(o) 296	Purpura and other haemorrhagic conditions .. .. .		29	29	8	2
	(p) 297	Agranulocytosis .. .. .		7	7	4	
	(q) 298	Diseases of spleen .. .. .		48	48	4	1
	(r) 299	Other diseases of blood and blood- forming organs .. .. .	1	28	29	7	2
		V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.					
A 67	(a) 300	Schizophrenic disorders (dementia praecox) .. .. .	1	11	12	1	
	(b) 301	Maniac-depressive reaction .. ..		15	15	3	4
	(c) 302	Involutional melancholia .. .. .					
	(d) 303	Paranoia and paranoid states ..					
	(e) 304	Senile psychoses .. .. .	3	78	81	22	39
A 68	(f) 305-309	Other and unspecified psychoses ..	3,249	3,367	6,616	310	3,526
	(a) 311	Hysterical reaction .. .. .					
	(b) 314	Neurotic-depressive reaction .. ..					
	(c) 322	Alcoholism .. .. .	2	293	295	2	1
	(d) 323	Other drug addiction .. .. .					
	(e) 310						
	312-313 } 315-321 }	Other psychoneuroses and disorders of personality .. .. .	3	319	322	4	11
A 69	324 } 326 }						
	325	Mental deficiency .. .. .	3	34	37	1	1
		<i>Carried forward</i> ..	10,348	60,520	70,863	4,696	10,939



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951
		<i>Brought forward</i> ..	10,348	60,520	70,868	4,696	10,939
		<b>VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.</b>					
A 70	(a) 331	Cerebral haemorrhage ..	6	182	188	132	6
	(b) 332	Cerebral embolism and thrombosis ..	20	185	205	64	21
	(c) 330	Other vascular lesions affecting central nervous system ..					
	333-334	Non-meningococcal meningitis ..	3	172	175	110	4
A 71	340	Multiple sclerosis ..	2	2	4		
A 72	345	Epilepsy ..	12	327	339	20	13
A 73	353	Conjunctivitis and ophthalmia ..	37	2,565	2,602	..	54
A 74	(a) 370	Other inflammatory diseases of eye ..	17	301	318	..	14
	(b) 371-379	Cataract ..					
A 75	385	Glaucoma ..					
A 76	387	Otitis externa ..	2	162	164	..	6
A 77	(a) 390	Otitis media and mastoiditis ..	9	373	382	5	7
	(b) 391-393	Other inflammatory diseases of ear ..	6	143	149	3	4
	(c) 394						
A 78	(a) 380-384	All other diseases and conditions of eye	225	2,065	2,290	1	190
	386,388						
	389	Intracranial and intraspinal abscess	2	23	25	17	1
	(b) 342	Encephalitis, myelitis and encephalo-					
	(c) 343	myelitis ..	4	73	77	36	3
	(d) 350	Paralysis agitans ..	6	18	24	..	4
	(e) 352	Other cerebral paralysis ..	132	476	608	42	127
	(f) 356	Motor neurone disease and muscular atrophy ..	..	2	2	..	1
	(g) 357	Other diseases of spinal cord ..	8	34	42	4	10
	(h) 366	Other and unspecified forms of neuralgia and neuritis ..	49	1,361	1,410	2	43
	(i) 367	Other diseases of cranial nerves ..	..	21	21	9	
	(j) 369	Diseases of peripheral autonomic nervous system ..					
	(k) 341, 344						
	351, 354						
	355	All other diseases of the nervous system and sense organs ..	18	698	716	2	17
	360-365						
	368						
	395-398						
		<b>VII.—DISEASES OF THE CIRCULATORY SYSTEM.</b>					
A 79	(a) 400	Rheumatic fever without mention of heart involvement ..	6	202	208	3	7
	(b) 401	Rheumatic fever with heart involvement ..	6	74	80	10	3
	(c) 402	Chorea ..	..	8	8		
A 80	(a) 410-413	Diseases of valves specified as rheumatic ..					
	(b) 414	Other endocarditis specified as rheumatic ..					
	(c) 415	Other myocarditis specified as rheumatic ..	1	70	71	27	3
	(d) 416	Other heart disease specified as rheumatic ..					
A 81	(a) 420	Arteriosclerotic heart disease, including coronary disease ..	6	81	87	25	3
	(b) 421	Chronic endocarditis not specified as rheumatic ..	38	658	696	135	42
	(c) 422	Other myocardial degeneration ..	20	353	373	142	15
A 82	(a) 430	Acute and subacute endocarditis ..	1	66	67	10	2
	(b) 431	Acute myocarditis ..	9	172	181	57	7
	(c) 432	Acute pericarditis ..	2	47	49	14	2
	(d) 433	Functional disease of heart ..	10	152	162	46	6
	(e) 434	Other and unspecified diseases of heart	40	910	950	356	48
A 83	440-443	Hypertension with heart disease ..					
A 84	444-447	Hypertension without mention of heart	18	637	705	86	38
A 85	(a) 450	General arteriosclerosis ..	9	60	69	15	5
	(b) 451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm ..					
	(c) 452	Other aneurysm, except of heart and aorta ..	2	18	20	4	
		<i>Carried forward</i> ..	11,074	73,261	84,335	6,073	11,645



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	11,074	73,261	84,335	6,073	11,645
		VII.—DISEASES OF THE CIRCULATORY SYSTEM—(cont.)					
	(d) 453	Peripheral vascular disease ..					
	(e) 454	Arterial embolism and thrombosis ..					
	(f) 455	Gangrene of unspecified cause ..	5	64	69	5	8
	(g) 456	Other diseases of arteries ..	3	47	50	9	3
A 86	(a) 460, 462	Varicose veins ..	5	107	112	1	1
	(b) 461	Haemorrhoids ..	19	887	906	1	22
	(c) 463-464	Phlebitis and thrombophlebitis ..	2	49	51		
	(d) 465	Pulmonary embolism and infarction..					
	(e) 466	Other venous embolism and thrombosis	2	50	52	2	2
	(f) 467	Other diseases of circulatory system..	2	144	146	8	6
	(g) 468	(a) Adenitis ..	15	1,624	1,639	3	54
		(b) Lymphadenitis ..	12	316	328	..	4
		(c) Other diseases of lymph nodes and lymph channels ..	5	124	129	5	6
		VIII.—DISEASES OF THE RESPIRATORY SYSTEM.					
A 87	(a) 470	Acute nasopharyngitis (common cold)					
	(b) 471	Acute sinusitis ..					
	(c) 472	Acute pharyngitis ..					
	(d) 473	Acute tonsillitis ..	18	1,321	1,339	3	17
	(e) 474	Acute laryngitis and tracheitis ..	5	213	218	7	2
	(f) 475	Other acute upper respiratory infections ..	11	1,057	1,068	1	13
A 88	(a) 480	Influenza with pneumonia ..	9	467	476	5	17
	(b) 481	Influenza with other respiratory manifestations, and influenza un- qualified ..	82	4,864	4,946	6	76
	(c) 482	Influenza with digestive manifesta- tions, but without respiratory symptoms ..					
	(d) 483	Influenza with nervous manifesta- tions, but without digestive or respiratory symptoms ..					
A 89	490	Lobar pneumonia ..	29	897	926	135	24
A 90	491	Broncho-pneumonia ..	57	2,670	2,727	1,022	46
A 91	492-493	Primary atypical, other and unspeci- fied pneumonia ..	20	908	928	176	23
A 92	500	Acute bronchitis ..	53	3,683	3,736	52	64
A 93	(a) 501	Bronchitis unqualified ..	76	4,278	4,354	23	90
	(b) 502	Chronic bronchitis ..	76	1,742	1,818	54	74
A 94	510	Hypertrophy of tonsils and adenoids..					
A 95	(a) 518	Empyema ..	11	80	91	6	4
	(b) 521	Abscess of lung ..	5	79	84	18	13
A 96	519	Pleurisy ..	33	455	488	24	35
A 97	(a) 517	Other diseases of upper respiratory tract ..	..	332	332	4	10
	(b) 520	Spontaneous pneumothorax ..					
	(c) 522	Pulmonary congestion and hypostasis	6	77	83	26	3
	(d) 525	Other chronic interstitial pneumonia	1	1	2		
	(e) 523	Pneumoconiosis ..					
	(f) 526	Bronchiectasis ..					
	(g) 511-516 } 524 } 527 }	All other respiratory diseases..	25	838	863	42	20
		IX.—DISEASES OF THE DIGESTIVE SYSTEM.					
A 98	(a) 530	Dental caries ..	9	407	416	..	8
	(b) 531-535	(a) Gingivitis ..					
		(b) Pyorrhoea ..	3	89	92	1	2
		(c) Other diseases of teeth and supporting structures ..	15	1,088	1,103	9	18
		<i>Carried forward</i> ..	11,688	102,219	113,907	7,721	12,310

TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	11,688	102,210	113,907	7,721	12,310
		IX.—DISEASES OF THE DIGESTIVE SYSTEM—(cont.)					
A 99	540	Ulcer of stomach .. ..	46	782	828	58	29
A 100	541	Ulcer of duodenum .. ..	10	157	167	10	10
A 101	543	Gastritis and duodenitis .. ..	80	2,889	2,969	24	53
A 102	550-553	Appendicitis .. ..	32	1,618	1,650	37	52
A 103	(a) 560	Hernia of abdominal cavity without mention of obstruction .. ..	39	843	882	4	38
	(b) 561	Hernia of abdominal cavity with obstruction .. ..	5	235	240	22	5
	(c) 570	(a) Intussusception .. ..	..	25	25	6	..
		(b) Volvulus .. ..	..	..	..	..	..
		(c) Other intestinal obstruction ..	3	141	144	62	3
A 104	(a) 571.0	Gastro-enteritis and colitis between 4 weeks and 2 years .. ..	28	2,017	2,045	640	34
	(b) 571.1	Gastro-enteritis and colitis, ages 2 years and over .. ..	73	3,381	3,454	250	66
	(c) 572	Chronic enteritis and ulcerative colitis	..	..	..	..	..
A 105	(a) 581.0	Cirrhosis of liver without mention of alcoholism .. ..	25	420	445	109	18
	(b) 581.1	Cirrhosis of liver with alcoholism ..	..	..	..	..	..
A 106	(a) 584	Cholelithiasis .. ..	1	36	37	1	1
	(b) 585	Cholecystitis without mention of calculi	6	199	205	11	7
A 107	(a) 536	Stomatitis .. ..	..	..	..	..	..
	(b) 538	Other diseases of buccal cavity ..	..	..	..	..	..
	(c) 539	(a) Functional disorders of oesophagus .. ..	2	22	24	3	1
		(b) Stricture or obstruction of oesophagus .. ..	1	73	74	9	6
	(d) 544	Disorders of function of stomach ..	..	..	..	..	..
	(e) 545	Other diseases of stomach and duodenum .. ..	..	..	..	..	..
	(f) 573	(a) Constipation .. ..	4	435	439	..	5
		(b) Other functional disorders of intestines .. ..	11	878	889	10	13
	(g) 574	Anal fissure and fistula .. ..	..	..	..	..	..
	(h) 575	Abscess of anal and rectal regions ..	2	339	341	..	14
	(i) 576	Peritonitis .. ..	2	142	144	83	4
	(j) 578	Other diseases of intestines and peritoneum .. ..	..	..	..	..	..
	(k) 580	(a) Acute yellow atrophy of liver ..	..	23	23	7	..
		(b) Degeneration of liver .. ..	..	..	..	..	..
		(c) Hepatitis .. ..	18	374	392	31	16
	(l) 583	Other diseases of liver .. ..	21	253	274	36	14
	(m) 586	Other diseases of gall-bladder and biliary ducts .. ..	7	193	200	25	8
	(n) 587	Diseases of pancreas .. ..	..	14	14	6	..
	(o) 537, 542 } 577, 582 }	Other diseases of digestive system ..	..	..	..	..	..
		X.—DISEASES OF THE GENITO- URINARY SYSTEM.					
A 108	590	Acute nephritis .. ..	29	453	482	46	27
A 109	(a) 591	Nephritis with oedema, including nephrosis .. ..	..	..	..	..	..
	(b) 592	Chronic nephritis .. ..	29	458	487	98	26
	(c) 593	Nephritis not specified as acute or chronic .. ..	31	446	477	62	19
	(d) 594	Other renal sclerosis .. ..	..	..	..	..	..
A 110	600	Infections of kidney .. ..	16	747	763	9	25
A 111	(a) 602	Calculi of kidney and ureter .. ..	8	163	171	3	8
	(b) 604	Calculi of other parts of urinary system	9	157	166	2	6
A 112	610	Hyperplasia of prostate .. ..	3	49	52	2	5
A 113	620-621	Diseases of breast .. ..	6	159	165	..	8
		<i>Carried forward</i> ..	12,235	120,340	132,575	9,387	12,831



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)  
(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	12,235	120,340	132,575	9,387	12,831
		<b>X.—DISEASES OF THE GENITO- URINARY SYSTEM—(cont.)</b>					
A 114	(a) 603	Other diseases of kidney and ureter ..	10	380	390	44	12
	(b) 605	Cystitis .. .. .	14	382	396	5	9
	(c) 606	Other diseases of bladder .. ..	..	106	106	2	3
	(d) 608	Stricture of urethra .. .. .	11	332	343	4	12
	(e) 609	Other diseases of urethra .. ..	3	378	381	4	10
	(f) 612	Other diseases of prostate .. ..	3	116	119	3	5
	(g) 613	Hydrocele .. .. .	6	197	203	..	4
	(h) 614	Orchitis and epididymitis .. ..	5	320	325	..	13
	(i) 617	Other diseases of male genital organs	9	323	332	2	7
	(j) 622	Acute salpingitis and oophoritis ..	..	..	..	..	..
	(k) 625	Other diseases of ovary and Fallopian tube .. .. .	14	368	382	7	14
	(l) 626	Diseases of parametrium and pelvi- peritoneum (female) .. .. .	..	11	11	..	..
	(m) 630	Infective disease of uterus, vagina and vulva .. .. .	..	..	..	..	..
	(n) 633	Other diseases of uterus .. .. .	26	1,013	1,039	12	27
	(o) 634	Disorders of menstruation .. ..	..	..	..	..	..
	(p) 637	Other diseases of female genital organs	15	643	658	2	22
	(q) 601	All other diseases of the genito-urinary system .. .. .	..	..	..	..	..
	607, 611						
	615-616						
	623-624						
	631-632						
	635-636						
		<b>XI.—DELIVERIES AND COMPLI- CATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM.</b>					
A 115	(a) 640	Pyelitis and pyelonephritis of pregnancy .. .. .	..	..	..	..	..
	(b) 641	Other infections of genito-urinary tract during pregnancy .. .. .	..	..	..	..	..
	(c) 681	Sepsis of childbirth and the puerperium	5	168	173	21	8
	(d) 682	Puerperal phlebitis and thrombosis ..	..	3	3	..	..
	(e) 684	Puerperal pulmonary embolism .. ..	..	7	7	1	..
A 116	(a) 642	(a) Albuminuria of pregnancy .. ..	..	165	165	3	5
		(b) Eclampsia of pregnancy .. .. .	2	208	210	44	11
		(c) Hyperemesis gravidarum .. .. .	3	147	150	6	3
		(d) Acute yellow atrophy of liver ..	..	4	4	1	..
		(e) Other toxæmias of pregnancy .. ..	14	244	258	16	6
	(b) 652	Abortion with toxæmia, without mention of sepsis .. .. .	..	36	36	2	..
	(c) 685	Puerperal eclampsia .. .. .	..	49	49	23	2
	(d) 686	Other forms of puerperal toxæmia ..	3	74	77	6	4
A 117	(a) 643	Placenta prævia .. .. .	1	98	99	13	4
	(b) 644	Other hæmorrhage of pregnancy .. ..	4	185	189	17	1
	(c) 670	Delivery complicated by placenta prævia or antepartum hæmorrhage	1	136	137	23	..
	(d) 671	Delivery complicated by retained placenta .. .. .	..	..	..	..	..
	(e) 672	Delivery complicated by other post- partum hæmorrhage .. .. .	4	269	273	86	5
A 118	650	Abortion without mention of sepsis or toxæmia .. .. .	48	2,378	2,426	5	39
A 119	651	Abortion with sepsis .. .. .	..	..	..	..	..
A 120	(a) 645	Ectopic pregnancy .. .. .	3	104	107	14	3
	(b) 646	Anæmia of pregnancy .. .. .	..	..	..	..	..
	(c) 683	Pyrexia of unknown origin during the puerperium .. .. .	..	..	..	..	..
	(d) 688.1	Puerperal psychoses .. .. .	2	13	15	3	..
	(e) 689	Mastitis and other disorders of lactation .. .. .	..	23	23	..	..
	(f) 647-649	Other complications of pregnancy, childbirth and the puerperium ..	54	2,142	2,196	81	42
	673-680						
	687						
	688.0						
	688.2-688.3	Delivery without complications ..	720	37,256	37,976	..	821
	(g) 660						
		<i>Carried forward</i> ..	13,215	168,618	181,833	9,837	13,923

TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	13,215	168,618	181,833	9,837	13,923
		XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE					
		AND					
		XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.					
A 121	(a) 690	Boil and carbuncle .. .. .	37	1,010	1,047	5	16
	(b) 691-693	Cellulitis and abscess .. .. .	192	5,219	5,411	35	145
	(c) 694-698	Other infections of skin and subcuta- neous tissue .. .. .					
A 122	(a) 720	Acute arthritis due to pyogenic organisms .. .. .					
	(b) 721	Acute nonpyogenic arthritis .. .. .					
	(c) 722	Rheumatoid arthritis and allied conditions .. .. .	10	337	347	..	14
	(d) 723-725	Arthritis specified and unspecified ..					
A 123	(a) 726	Muscular rheumatism .. .. .	23	922	945	4	24
	(b) 727	Rheumatism unspecified .. .. .	3	112	115	..	3
A 124	730	Osteomyelitis and periostitis .. .. .	27	382	409	6	39
A 125	(a) 737	Ankylosis of joint .. .. .					
	(b) 745-749	Other acquired musculoskeletal deformities .. .. .					
A 126	(a) 715	Chronic ulcer of skin (including tropical ulcer) .. .. .	220	3,579	3,799	5	196
	(b) 700-714 } 716 }	All other diseases of skin .. .. .	180	5,042	5,222	4	147
	(c) 731-736 } 738-744 }	All other diseases of musculoskeletal system .. .. .	106	1,771	1,877	10	73
		XIV.—CONGENITAL MALFORMATIONS.					
A 127	751	Spina bifida and meningocele ..	..	3	3	1	
A 128	754	Congenital malformations of circulatory system .. .. .	3	37	40	19	
A 129	(a) 750	Monstrosity .. .. .	..	4	4	3	
	(b) 752	Congenital hydrocephalus .. .. .	2	30	32	10	4
	(c) 753	Other congenital malformations of nervous system and sense organs ..					
	(d) 755	Cleft palate and harelip .. .. .	4	152	156	1	4
	(e) 756	(a) Congenital hypertrophic pyloric stenosis .. .. .	..	4	4	4	
		(b) Imperforate anus .. .. .	3	45	48	12	
		(c) Other congenital malformations of digestive system .. .. .					
	(f) 757	Congenital malformations of genito- urinary system .. .. .					
	(g) 758	Congenital malformations of bone and joint .. .. .					
	(h) 759	Other and unspecified congenital malformations, not elsewhere classified .. .. .	5	75	80	15	3
		XV.—CERTAIN DISEASES OF EARLY INFANCY.					
A 130	(a) 760	Intracranial and spinal injury at birth					
	(b) 761	Other birth injury .. .. .	..	70	70	45	2
A 131	762	Postnatal asphyxia and atelectasis ..	..	61	61	49	
A 132	(a) 764	Diarrhoea of newborn .. .. .					
	(b) 765	Ophthalmia neonatorum .. .. .	2	31	33	23	
	(c) 763	Pneumonia of newborn .. .. .					
	(d) 766	Pemphigus neonatorum .. .. .	..	5	5	3	
		<i>Carried forward</i> ..	14,032	187,509	201,541	10,091	14,593



TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	14,032	187,509	201,541	10,091	14,593
		<b>XV.—CERTAIN DISEASES OF EARLY INFANCY—(cont.)</b>					
	(e) 767	Umbilical sepsis .. ..	..	31	31	15	1
A 133	(f) 768	Other sepsis of newborn .. ..	..				
A 134	770	Haemolytic disease of newborn .. ..					
	769	All other defined diseases of early					
A 135	771-772	infancy .. ..					
	(a) 773	Congenital debility .. ..	1	71	72	26	1
	(b) 774	Premature birth .. ..	21	1,481	1,502	723	15
	(c) 775-776	Other ill-defined diseases peculiar to early infancy and immaturity un- qualified .. ..	7	478	485	110	3
		<b>XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.</b>					
A 136	794	Senility without mention of psychoses	413	1,213	1,626	380	297
A 137	(a) 780	Infantile convulsions .. ..	7	195	202	81	2
	(b) 788.8	Pyrexia of unknown origin .. ..					
	(c) 793	Observation, without need for further medical care .. ..	271	5,504	5,775	1	269
	(d) 781-787						
	789-792						
	795	(a) Malingering .. ..	..	157	157	..	1
	788.1-788.7	(b) Sudden death (cause unknown)	..	8	8	8	
	788.9	(c) Found dead (cause unknown)					
		(d) Other ill-defined and unknown causes of morbidity and mortality .. ..	174	5,254	5,428	142	188
		<b>XVII.—ACCIDENTS, POISONINGS AND VIOLENCE.</b>					
		<b>"E" CODE : ALTERNATIVE CLASSIFI- CATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES).</b>					
AE 138	E 810-E 835	Motor vehicle accidents .. ..	157	3,268	3,425	311	132
AE 139	(a) E 800-E 802	Railway accidents .. ..	1	74	75	6	4
	(b) E 850-E 858	Water transport accidents .. ..	..	2	2		
	(c) E 860-E 866	Aircraft accidents .. ..	..	1	1	1	
	(d) E 840-E 845	Other transport accidents .. ..					
AE 140	(a) E 870	Accidental poisoning by morphia and other opium derivatives .. ..	33	736	769	2	12
	(b) E 874	Accidental poisoning by other analgesic and soporific drugs .. ..					
	(c) E 878	Accidental poisoning by other and unspecified drugs .. ..					
	(d) E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies					
	(e) E 884	Accidental poisoning by mercury and its compounds .. ..					
	(f) E 885	Accidental poisoning by lead and its compounds .. ..	..	7	7		
	(g) E 886	Accidental poisoning by arsenic and antimony and their compounds ..	4	85	89	7	4
	(h) E 888	Accidental poisoning by other and unspecified solid or liquid substances	2	115	117	6	1
	(i) E 890-E 895	Accidental poisoning by gases and vapours .. ..	..	1	1		
	(j) E 871-E 873						
	E 875-E 877	Other accidental poisoning .. ..	1	51	52	2	
	E 879-E 882						
	E 887						
AE 141	E 900-E 904	Accidental falls .. ..	245	7,895	8,140	124	283
AE 142	E 912	Accident caused by machinery .. ..	17	284	301	4	12
AE 143	E 916	Accident caused by fire and explosion of combustible material .. ..					
		<i>Carried forward</i> ..	15,386	214,420	229,806	12,040	15,818

TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	15,386	214,420	229,806	12,040	15,818
		<b>XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(cont.)</b>					
		<b>"E" CODE : ALTERNATIVE CLASSIFI- CATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES) —(cont.)</b>					
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation					
AE 145	E 919	Accident caused by firearm ..	22	384	406	36	23
AE 146	E 929	Accidental drowning and submersion	..	15	15		
AE 147 (a)	E 920	Foreign body entering eye and adnexa					
(b)	E 923	Foreign body entering other orifice ..					
(c)	E 927	Accidents caused by bites and stings of venomous animals and insects ..	10	679	689	9	10
(d)	E 928	Other accidents caused by animals ..	13	588	601	2	8
AE 148 (a)	E 913	Accidents caused by cutting or piercing instruments ..	61	2,025	2,086	5	80
(b)	E 914	Accidents caused by electric current..	..	18	18	..	1
(c)	E 925	Accidental mechanical suffocation ..					
(d)	E 926	Lack of care of infants under 1 year of age ..	..	2	2		
(e)	E 931	Excessive heat ..	..	17	17		
(f)	E 932	Excessive cold ..					
(g)	E 933	Hunger, thirst and exposure ..					
(h)	E 934	Cataclysm ..					
(i)	E 935	Lightning ..	..	12	12		
(j)	E 936	(a) Accidents in mines and quarries	17	256	273	2	12
		(b) Agricultural and forestry accidents ..	4	182	186	5	3
		(c) Accidental injury by crushing or landslide ..	32	1,087	1,119	16	40
		(d) Other and unspecified accidents	15	583	598	7	12
(k)	E 940	Generalized vaccinia following vaccination ..	1	5	6		
(l)	E 941-E 942	Other complications of smallpox vaccination ..					
(m)	E 954	Anaesthetic accidents ..					
(n)	E 950-E953 } E 955-E959 }	Accidents due to medical or surgical intervention ..	..	8	8	6	1
(o)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances..	..	6	6	2	
(p)	E 971	Suicide and self-inflicted injury by other solid and liquid substances ..	1	205	206	51	9
(q)	E 972	Suicide and self-inflicted injury by gases in domestic use ..					
(r)	E 973	Suicide and self-inflicted injury by other gases ..					
(s)	E 974	Suicide and self-inflicted injury by hanging or strangulation ..	..	18	18	5	1
(t)	E 975	Suicide and self-inflicted injury by submersion (drowning) ..	..	10	10	2	
(u)	E 976	Suicide and self-inflicted injury by firearms and explosives ..	2	5	7	1	1
(v)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..	1	62	63	12	3
(w)	E 978	Suicide and self-inflicted injury by jumping from high place ..	..	3	3	2	
(x)	E 979	Suicide and self-inflicted injury by other and unspecified means ..	4	14	18	1	
(y)	E 910-E911 } E 915 E 921-E922 E 924-E930 E 943-E946 E 960-E965 }	All other accidental causes ..	95	722	817	17	19
AE 149 (a)	E 980	Non-accidental poisoning by another person ..					
		<i>Carried forward</i> ..	15,664	221,326	236,990	12,221	16,041



TABLE 1—(cont.)

IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)  
(All Hospitals including Special Institutions)—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	Remain- ing at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remain- ing at end of 31st Dec., 1951.
		<i>Brought forward</i> ..	15,664	221,326	236,990	12,221	16,041
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(cont.)					
		“ E ” CODE: ALTERNATIVE CLASSIFI- CATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES) —(cont.)					
	(b) E 981	Assault by firearm and explosive ..	79	983	1,062	119	50
	(c) E 982	Assault by cutting or piercing instruments .. .. .	15	635	650	20	11
	(d) E 983	Assault by other means .. .. .	34	1,689	1,723	11	48
	(e) E 984	Injury by intervention of police ..					
	(f) E 985	Execution (legal) .. .. .					
AE 150	E 990-E 999	Injury resulting from operations of war .. .. .					
		“ N ” CODE.—ALTERNATIVE CLASSI- FICATION OF ACCIDENTS, POISONING, AND VIOLENCE (NATURE OF INJURY).					
AN 138	N 800-N 804	Fracture of skull .. .. .					
AN 139	N 805-N 809	Fracture of spine and trunk .. ..					
AN 140	N 810-N 829	Fracture of limbs .. .. .					
AN 141	N 830-N 839	Dislocation without fracture .. ..					
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles .. .. .					
AN 143	N 850-N 856	Head injury excluding fracture ..					
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis .. .. .					
AN 145	N 870-N 908	Laceration and open wounds .. ..					
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..					
AN 147	N 930-N 936	Effects of foreign body entering through orifice .. .. .					
AN 148	N 940-N 949	Burns .. .. .	49	1,242	1,291	82	51
AN 149	N 960-N 979	Effects of poisons .. .. .					
AN 150	N 950-N 959 } N 980-N 999 }	All other and unspecified effects of external causes .. .. .					
		TOTAL ..	15,841	225,875	241,716	12,453	16,201

TABLE 1—(cont.)

## IN-PATIENTS—(cont.)

RETURN OF DISEASES AND DEATHS FOR THE YEAR 1951—(cont.)

(All Hospitals including Special Institutions)—(cont.)

Nationalities.	Remaining at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remaining at end of 31st Dec., 1951.
Europeans .. .. .	58	2,565	2,623	47	69
Eurasians .. .. .	55	1,036	1,091	43	62
Chinese .. .. .	9,510	94,109	103,619	8,355	9,698
Indians .. .. .	3,191	71,386	74,577	2,672	3,216
Malays .. .. .	2,910	53,974	56,884	1,191	3,004
Javanese .. .. .	64	1,475	1,539	78	86
Japanese .. .. .	1	9	10	1	2
Others .. .. .	52	1,321	1,373	66	64
TOTAL ..	15,841	225,875	241,716	12,453	16,201
Healthy persons admitted to hospitals to accompany children or friends .. .. .	192	10,378	10,570	..	193

## SUMMARY ACCORDING TO MEN, WOMEN AND CHILDREN.

—	Remaining at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remaining at end of 31st Dec., 1951.
Men .. .. .	10,631	119,524	130,155	5,636	10,640
Women .. .. .	4,341	78,519	82,860	2,160	4,717
Children (1 to 10 years) .. .. .	639	16,011	16,650	1,675	583
Infants (under 1 year) .. .. .	230	11,821	12,051	2,982	261
TOTAL ..	15,841	225,875	241,716	12,453	16,201

SUMMARY ACCORDING TO HOSPITALS AND AVERAGE DAILY  
NUMBER OF PATIENTS.

—	Remaining at end of 31st Dec., 1950.	Admis- sions.	Total cases treated.	Deaths.	Remaining at end of 31st Dec., 1951.	Average daily No. of patients.	No. of beds.
1. Kedah .. .. .	725	27,353	28,078	856	790	854	1,039
2. Perlis .. .. .	101	3,039	3,140	107	81	97	124
3. Penang and Province Wellesley .. .. .	1,248	21,016	22,264	1,344	1,258	1,326	1,727
4. Perak .. .. .	1,913	49,229	51,142	2,747	1,937	2,058	2,686
5. Selangor .. .. .	1,473	29,424	30,897	1,978	1,513	1,627	1,808
6. Negri Sembilan .. .. .	979	22,719	23,698	1,095	1,009	1,045	1,198
7. Malacca .. .. .	580	11,073	11,653	699	648	662	837
8. Johore .. .. .	1,575	33,908	35,483	2,106	1,485	1,605	2,219
9. Kelantan .. .. .	330	5,951	6,281	190	309	302	440
10. Trengganu .. .. .	199	3,644	3,843	121	190	185	302
11. Pahang .. .. .	620	15,947	16,567	838	568	623	787
12. Leper Settlement, Sungei Buloh .. .. .	2,222	509	2,731	36	2,311	2,282	2,650
13. Leper Settlement, Johore Bharu .. .. .	392	67	459	16	404	403	302
14. Leper Settlement, Pulau Jerejak .. .. .	403	21	424	14	372	386	500
15. C. M. H., Tanjong Rambutan .. .. .	3,081	1,975	5,056	306	3,326	3,172	3,000
TOTAL ..	15,841	225,875	241,716	12,453	16,201	16,627	19,619



TABLE 1A.

STATEMENT OF GENERAL HOSPITALS, DISTRICT  
AND MATERNITY HOSPITALS.

State/Settlement.	Average daily number of patients.	Patients remaining at the end of the year.	Patients admitted.	Deaths.	Death rate per 100 patients treated.
<b>KEDAH.</b>					
General Hospital, Alor Star ..	425	397	11,721	406	3.4
District Hospital, Sungei Patani ..	174	119	7,348	225	3.0
District Hospital, Kulim ..	185	151	6,418	192	2.9
District Hospital, Baling ..	22	16	957	12	1.2
District Hospital, Langkawi ..	48	42	909	21	2.2
<b>PERLIS.</b>					
District Hospital, Kangar ..	97	101	3,039	107	3.4
<b>PENANG AND PROVINCE WELLESLEY.</b>					
General Hospital, Penang ..	538	496	8,929	842	8.9
Maternity Hospital, Penang ..	63	64	3,279	65	1.9
Perak Road Hospital, Penang ..	42	35	34	15	21.7
Prison Hospital, Penang ..	9	5	441	—	—
District Hospital, Balik Pulau ..	11	7	269	—	—
* Detention Camp Hospital, Pulau Jerejak ..	12	10	184	—	—
Tuberculosis Hospital, Pulau Jerejak ..	342	369	273	64	9.9
District Hospital, Butterworth ..	100	87	2,360	94	3.8
District Hospital, Bukit Mertajam	113	85	3,383	130	3.7
District Hospital, Sungei Bakap ..	96	90	1,864	134	6.9
<b>PERAK.</b>					
District Hospital, Parit Buntar ..	40	34	1,922	47	2.4
District Hospital, Taiping ..	431	384	8,923	530	5.7
District Hospital, Kuala Kangsar	95	87	3,016	69	2.2
Women's Hospital, K. Kangsar ..	82	57	2,478	123	4.8
District Hospital, Ipoh ..	536	502	12,039	926	7.4
General Hospital, Batu Gajah ..	245	241	4,762	265	5.3
District Hospital, Kampar ..	74	83	2,761	111	3.9
District Hospital, Tapah ..	158	146	3,230	137	4.0
District Hospital, Tanjong Malim	34	24	1,787	62	3.4
District Hospital, Telok Anson ..	194	196	4,634	271	5.6
District Hospital, Lumut ..	161	154	3,260	193	5.7
District Hospital, Grik ..	8	5	417	13	3.1
<b>SELANGOR.</b>					
Bungsar Hospital, Kuala Lumpur	43	31	1,009	31	3.0
General Hospital, Kuala Lumpur	553	459	14,372	1,174	6.1
† Tanglin Hospital, K. Lumpur	66	84	197	5	1.8
Tuberculosis Hospital, K. Lumpur	114	115	124	36	15.1
Tai Wah (Decrepit) Hospital, Kuala Lumpur ..	415	435	204	152	23.8
Police Depot Hospital, Kuala Lumpur ..	20	5	1,029	—	—
Prison Hospital, Kuala Lumpur ..	17	—	202	1	0.5
District Hospital, Klang ..	211	198	5,515	342	6.0
District Hospital, Kajang ..	119	100	4,776	143	2.9
District Hospital, Kuala Kubu Bahru ..	69	46	1,996	94	4.6
<b>NEGRI SEMBILAN.</b>					
General Hospital, Seremban ..	459	402	9,725	597	5.9
District Hospital, Kuala Pilah ..	227	196	3,770	113	2.8
Women's Hospital, Kuala Pilah ..	91	90	2,194	115	5.0
District Hospital, Port Dickson ..	110	115	2,128	104	4.6
District Hospital, Tampin ..	79	90	2,628	98	3.6
District Hospital, Jekebu ..	76	82	2,037	67	3.2
Prison Hospital, Seremban ..	3	4	237	1	0.4
<i>Carried forward</i> ..	7,007	6,439	152,780	8,127	

\* Closed in September, 1951.

† Closed on 4-3-1951.

TABLE 1A—(cont.)

STATEMENT OF GENERAL HOSPITALS, DISTRICT AND  
MATERNITY HOSPITALS—(cont.)

State/Settlement.	Average daily number of patients.	Patients remaining at the end of the year.	Patients admitted.	Deaths.	Death rate per 100 patients treated.
<i>Brought forward</i> ..	7,007	6,439	152,780	8,127	
<b>MALACCA.</b>					
General Hospital, Malacca ..	559	486	10,616	684	6.2
Detention Camp Hospital, Malacca ..	70	65	370	—	—
District Hospital, Alor Gajah ..	31	27	25	15	28.8
Prison Hospital, Malacca ..	2	2	36	—	—
Quarantine Camp Hospital, Malacca ..	—	—	26	—	—
<b>JOHORE.</b>					
General Hospital, Johore Bahru	611	586	10,922	661	5.7
3rd Mile Hospital, Johore Bahru	101	190	14	18	8.8
District Hospital, Pontian ..	56	54	1,364	69	4.9
District Hospital, Batu Pahat ..	133	128	2,945	180	5.9
District Hospital, Muar ..	193	180	4,085	377	8.8
District Hospital, Tangkak ..	59	56	1,520	54	3.4
District Hospital, Segamat ..	132	113	4,131	327	7.7
District Hospital, Kluang ..	191	176	5,520	279	4.9
District Hospital, Kota Tinggi ..	97	72	2,148	98	4.4
District Hospital, Mersing ..	32	20	1,259	39	3.0
<b>KELANTAN.</b>					
State Hospital, Kota Bahru ..	237	260	4,401	163	3.5
District Hospital, Kuala Krai ..	36	40	1,447	23	1.5
Prison Hospital, Pkg. Chepa ..	5	3	87	2	2.2
<b>TRENGGANU.</b>					
District Hospital, K. Trengganu	129	138	1,983	61	2.9
District Hospital, Kemaman ..	36	41	841	41	4.6
District Hospital, Dungun ..	20	20	820	19	2.3
<b>PAHANG.</b>					
District Hospital, Kuala Lipis ..	109	109	3,249	168	5.0
District Hospital, Kuantan ..	147	124	2,958	157	5.1
District Hospital, Raub ..	98	106	3,406	177	5.0
District Hospital, Bentong ..	101	105	1,934	162	7.9
District Hospital, Mentakab ..	110	106	3,465	155	4.3
District Hospital, Pekan..	58	70	935	19	1.9
	10,360	9,716	223,287	12,075	
<b>SPECIAL INSTITUTIONS.</b>					
Leper Settlement, Sungei Buloh..	2,282	2,222	509	36	1.3
Leper Settlement, Johore Bahru	403	392	67	16	4.6
Leper Settlement, Pulau Jerejak	386	403	21	14	3.3
Leper Camp, Kota Bahru ..	24	27	16	2	4.7
Central Mental Hospital, Tanjong Rambutan ..	3,172	3,081	1,975	306	6.1
<b>TOTAL</b> ..	16,627	15,841	225,875	12,449	5.2



TABLE 2.

## MALARIA ADMISSIONS BY STATES AND MONTHS FOR 1951.

State or Settlement.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Total.
Kedah ..	162	135	180	280	346	392	263	201	142	125	144	132	2,502
Perlis ..	36	35	32	31	52	74	48	43	14	8	41	54	468
Penang and P. Wellesley ..	58	42	56	79	80	99	75	82	54	45	38	42	750
Perak ..	294	228	236	214	232	272	335	285	284	218	248	242	3,088
Selangor ..	70	39	53	45	81	105	126	87	115	107	94	73	995
Negri Sembilan..	109	66	74	103	177	217	252	240	281	253	247	182	2,201
Malacca ..	35	26	49	40	88	138	94	116	110	74	58	46	874
Johore ..	142	98	114	180	314	341	354	303	465	431	322	331	3,395
Kelantan ..	49	25	57	61	91	103	89	79	79	62	87	84	866
Trengganu ..	36	40	51	46	79	81	64	63	80	58	62	64	724
Pahang ..	132	87	113	159	172	252	288	238	236	251	283	251	2,462
Total ..	1,123	821	1,015	1,238	1,712	2,074	1,988	1,737	1,860	1,632	1,624	1,501	18,325

TABLE 3.

## SURGICAL OPERATIONS FOR 1951.

State or Settlement.	Operations.	Deaths.
Kedah .. .. .	1,947	10
Perlis .. .. .	223	—
Penang and Province Wellesley ..	4,068	57
Perak .. .. .	14,641	80
Selangor .. .. .	8,368	59
Negri Sembilan .. .. .	1,793	25
Malacca .. .. .	1,962	25
Johore .. .. .	6,574	41
Kelantan .. .. .	717	11
Trengganu .. .. .	828	1
Pahang .. .. .	1,919	4
Total ..	43,040	313

TABLE 4.

## OPHTHALMIC PATIENTS FOR 1951.

State/Settlement.	Eye diseases proper.	Eye injuries.	Refrac- tion.	General diseases affecting eyes.	Disor- ganised eyes.	Total.	Opera- tions.
Kedah .. .. .	2,962	121	386	192	36	3,697	285
Perlis .. .. .	80	9	—	10	—	99	6
Penang and Province Wellesley .. .. .	3,664	277	628	363	69	5,101	541
Perak .. .. .	5,199	457	2,236	84	53	8,029	867
Selangor .. .. .	5,106	695	1,847	—	176	7,824	340
Negri Sembilan .. .. .	1,829	108	530	27	18	2,512	45
Malacca .. .. .	1,512	143	967	40	34	2,696	277
Johore .. .. .	1,748	160	3,323	95	—	5,326	—
Kelantan .. .. .	7,019	6	66	13	—	7,104	11
Trengganu .. .. .	—	—	—	—	—	—	—
Pahang .. .. .	2,004	6	48	5	—	2,063	—
Total ..	31,123	1,982	10,031	829	386	44,451	2,372



TABLE 5.

## SUMMARY OF OUT-PATIENTS TREATED IN EACH STATE AND SETTLEMENT FOR 1951.

(Excluding those who were treated at Infant Welfare Centres, School Inspections and Special Clinics.)

Hospitals and Dispensaries.	Adult Males.	Adult Females.	Children under 10 years.	Total.
<b>KEDAH.</b>				
At Hospitals and Dispensaries ..	77,286	53,372	57,888	188,546
By Travelling Dispensaries ..	21,456	6,361	11,577	39,394
Total ..	98,742	59,733	69,465	227,940
<b>PERLIS.</b>				
At Hospitals and Dispensaries ..	12,381	7,354	11,174	30,909
By Travelling Dispensaries ..	1,728	961	1,956	4,645
Total ..	14,109	8,315	13,130	35,554
<b>PENANG AND PROVINCE WELLESLEY.</b>				
At Hospitals and Dispensaries ..	49,596	32,430	36,091	118,117
By Travelling Dispensaries ..	14,678	11,626	24,973	51,277
Total ..	64,274	44,056	61,064	169,394
<b>PERAK.</b>				
At Hospitals and Dispensaries ..	175,087	70,290	80,415	325,792
By Travelling Dispensaries :				
1. Road .. ..	46,428	24,996	33,907	105,331
2. River .. ..	4,313	1,771	2,057	8,141
Total ..	225,828	97,057	116,379	439,264

TABLE 5—(cont.)

SUMMARY OF OUT-PATIENTS TREATED IN EACH  
STATE AND SETTLEMENT FOR 1951—(cont.)

Hospitals and Dispensaries.	Adult Males.	Adult Females.	Children under 10 years.	Total.
SELANGOR.				
At Hospitals and Dispensaries ..	131,501	68,378	77,003	276,882
By Travelling Dispensaries ..	21,855	16,783	19,183	57,821
Total ..	153,356	85,161	96,186	334,703
NEGRI SEMBILAN.				
At Hospitals and Dispensaries ..	61,270	26,603	38,753	126,626
By Travelling Dispensaries ..	23,337	19,055	20,390	62,782
Total ..	84,607	45,658	59,143	189,408
MALACCA.				
At Hospitals and Dispensaries ..	28,829	13,874	14,647	57,350
By Travelling Dispensaries ..	5,362	4,119	7,896	17,377
Total ..	34,191	17,993	22,543	74,727
JOHORE.				
At Hospitals and Dispensaries ..	66,966	19,921	28,375	115,262
By Travelling Dispensaries :				
1. Road .. ..	22,833	10,433	30,450	63,716
2. River .. ..	1,179	366	837	2,382
Total ..	90,978	30,720	59,662	181,360



TABLE 5—(cont.)

SUMMARY OF OUT-PATIENTS TREATED IN EACH  
STATE AND SETTLEMENT FOR 1951—(cont.)

Hospitals and Dispensaries.	Adult Males.	Adult Females.	Children under 10 years.	Total.
<b>KELANTAN.</b>				
At Hospitals and Dispensaries ..	39,785	18,228	25,370	83,383
By Travelling Dispensaries :				
1. Road .. ..	14,518	8,783	27,970	51,271
2. River .. ..	2,138	1,009	1,093	4,240
Total ..	56,441	28,020	54,433	138,894
<b>TRENGGANU.</b>				
At Hospitals and Dispensaries ..	32,013	14,749	22,308	69,070
By Travelling Dispensaries :				
1. Road .. ..	24,278	19,293	26,087	69,658
2. River .. ..	9,145	6,856	9,053	25,054
Total ..	65,436	40,898	57,448	163,782
<b>PAHANG.</b>				
At Hospitals and Dispensaries ..	56,187	29,595	43,615	129,397
By Travelling Dispensaries :				
1. Road .. ..	24,556	15,197	23,848	63,601
2. River .. ..	4,581	2,914	4,157	11,652
Total ..	85,324	47,706	71,620	204,650
<b>FEDERATION OF MALAYA.</b>				
At Hospitals and Dispensaries ..	730,901	354,794	435,639	1,521,334
By Travelling Dispensaries :				
1. Road .. ..	221,029	137,607	228,245	586,881
2. River .. ..	21,356	12,916	17,197	51,469
Total ..	973,286	505,317	681,081	2,159,684

TABLE 6.

## OUT-PATIENTS.

## RETURN OF DISEASES FOR THE YEAR 1951

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		I.—INFECTIVE AND PARASITIC DISEASES.				
A 1	001-008	Tuberculosis of respiratory system .. ..	3,159	986	62	4,207
A 2	010	Tuberculosis of meninges and central nervous system .. ..				
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands .. ..				
A 4	012-013	Tuberculosis of bones and joints .. ..				
A 5	(a) 014	Tuberculosis of skin and subcutaneous cellular tissue .. ..				
	(b) 015	Tuberculosis of lymphatic system .. ..				
	(c) 016	Tuberculosis of genito-urinary system .. ..				
	(d) 017	Tuberculosis of adrenal glands .. ..				
	(e) 018	Tuberculosis of other organs .. ..	89	66	40	195
	(f) 019	Disseminated tuberculosis .. ..				
A 6	020	Congenital syphilis .. ..			115	115
A 7	(a) 021.0-021.1	Primary syphilis .. ..	659	67	2	728
	(b) 021.2	Secondary syphilis .. ..	1,654	790	13	2,457
	(c) 021.3	Early syphilis, relapse following treatment ..				
	(d) 021.4	Early syphilis (unspecified stage) .. ..				
A 8	024	Tabes dorsalis .. ..				
A 9	025	General paralysis of insane .. ..				
A 10	(a) 022	Aneurysm of aorta .. ..				
	(b) 023	Other cardiovascular syphilis .. ..				
	(c) 026	Other syphilis of central nervous system ..				
	(d) 027	Tertiary syphilis .. ..	273	197	3	473
	(e) 028	Latent syphilis .. ..				
	(f) 029	Syphilis unqualified .. ..	310	62	7	379
A 11	(a) 030	Acute or unspecified gonorrhoea .. ..				
	(b) 031	Chronic gonococcal infection of genito-urinary system .. ..	2,352	307	2	2,661
	(c) 032	Gonococcal infection of joint .. ..				
	(d) 033	Gonococcal infection of eye .. ..	337	6	14	357
	(e) 034-035	Gonococcal infection of other sites .. ..	331	55	4	390
A 12	040	Typhoid fever .. ..	4	1		5
A 13	(a) 041	Paratyphoid fever A, B or C .. ..				
	(b) 042	Other salmonella infections .. ..				
A 14	043	Cholera .. ..				
A 15	044	Brucellosis (undulant fever) .. ..				
A 16	(a) 045	Bacillary dysentery .. ..	237	97	81	415
	(b) 046	Amoebiasis .. ..	558	186	126	870
	(c) 047-048	Other protozoal and unspecified forms of dysentery .. ..	1,578	930	684	3,192
A 17	050	Scarlet fever .. ..			1	1
A 18	051	Streptococcal sore throat .. ..				
A 19	052	Erysipelas .. ..	11	1	11	23
A 20	053	Septicaemia and pyaemia .. ..	6	3	3	12
A 21	055	Diphtheria .. ..	17	26	142	185
A 22	056	Whooping Cough .. ..	65	53	3,384	3,502
A 23	057	Meningococcal infections .. ..				
A 24	058	Plague .. ..				
A 25	060	Leprosy .. ..	151	46	8	205
A 26	(a) 061	Tetanus of the new-born .. ..				
	(b) —	Tetanus, other forms .. ..	1	1	3	5
A 27	062	Anthrax .. ..				
A 28	080	Acute Poliomyelitis .. ..			2	2
A 29	082	Acute infectious encephalitis .. ..				
A 30	081	Late effects of acute poliomyelitis and acute infectious encephalitis .. ..				
	083					
A 31	084	Smallpox .. ..				
A 32	085	Measles .. ..	308	40	371	719
A 33	091	Yellow fever .. ..				
A 34	092	Infectious hepatitis .. ..				
A 35	094	Rabies .. ..		1	1	2
A 36	(a) 100	Louse-borne epidemic typhus .. ..				
	(b) 101	Flea-borne endemic typhus (murine) .. ..				
	(c) 104	Tick-borne epidemic typhus .. ..				
	(d) 105	Mite-borne typhus .. ..	1			1
	(e) 102-103 } 106-108 }	Other and unspecified typhus .. ..				
A 37	(a) 110	Vivax malaria (benign tertian) .. ..	2,421	909	984	4,314
	(b) 111	Malariae malaria (quartan) .. ..	53	11	24	88
	(c) 112	Falciparum malaria (malignant tertian) ..	3,294	1,062	1,219	5,575
	(d) 114	Mixed malaria infections .. ..	6	1	7	14
		Carried forward ..	17,875	5,904	7,313	31,092



TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	17,875	5,904	7,313	31,092
		<b>I.—INFECTIVE AND PARASITIC DISEASES—(cont.)</b>				
		Blackwater fever .. .. .				
		Other and unspecified forms of malaria ..	46,898	19,371	25,350	91,619
A 38	(e) 115	Schistosomiasis vesical ( <i>S. haematobium</i> ) ..				
	(f) 113	Schistosomiasis intestinal ( <i>S. Mansoni</i> ) ..				
	116-117	Schistosomiasis Pulmonary ( <i>S. japonicum</i> ) ..				
	(a) 123.0	Other and unspecified Schistosomiasis ..				
	(b) 123.1	Hydatid disease .. .. .				
A 39	(c) 123.2	Onchocerciasis .. .. .				
A 40	(d) 123.3	Loiasis .. .. .				
	125	Filariasis ( <i>bancrofti</i> ) .. .. .	59	36	15	110
	(a) 127	Other filariasis .. .. .				
	(b) —	Ankylostomiasis .. .. .	3,945	2,428	3,390	9,763
	(c) —	Tape worm (infestation) and other cestode infestation .. .. .				
A 41	(d) —	Ascariasis .. .. .	15,895	11,110	49,895	76,900
A 42	(a) 126	Guinea worm ( <i>dracunculosis</i> ) .. .. .				
	(b) 130.0	Other trematode infestation .. .. .				
	(c) 130.3	Trichiniasis .. .. .				
	(d) 124	Other diseases due to helminths .. .. .	534	543	1,527	2,604
	(e) 128	Chancroid .. .. .				
A 43	(f) 130.1-130.2	Lymphogranuloma venereum .. .. .				
	(a) 036	Granuloma inguinale, venereal .. .. .				
	(b) 037	Other and unspecified venereal diseases ..				
	(c) 038	Food poisoning infection and intoxication ..	67	14	6	87
	(d) 039	Tularaemia .. .. .				
	(e) 049	Gas gangrene .. .. .				
	(f) 059	(a) Glanders .. .. .				
	(g) 063	(b) Melioidosis .. .. .				
	(h) 064	(c) Other bacterial diseases .. .. .				
	(i) 070	Vincent's infection .. .. .				
	(j) 071	Relapsing fever .. .. .				
	(k) 072	Leptospirosis icterohaemorrhagica ( <i>Weil's</i> disease) .. .. .				
	(l) 073	Yaws .. .. .	12,798	9,023	9,178	30,999
	(m) 086	Rubella .. .. .	4	..	7	11
	(n) 087	Chickenpox .. .. .	252	53	233	538
	(o) 088	Herpes Zoster .. .. .	325	54	43	422
	(p) 089	Mumps .. .. .				
	(q) 090	Dengue .. .. .	8	3	3	14
	(r) 093	Glandular fever .. .. .				
	(s) 095	Trachoma .. .. .				
	(t) 096.7	Sandfly fever .. .. .				
	(u) 120	Leishmaniasis .. .. .				
	(v) 121	(a) Trypanosomiasis gambiense .. .. .				
		(b) Trypanosomiasis rhodesiense .. .. .				
		(c) Other and unspecified trypanosomiasis ..				
	(w) 131	Dermatophytosis .. .. .	8,842	2,524	2,644	14,010
	(x) 135	Scabies .. .. .				
	(y) 054, 074					
	096.1-096.6					
	096.8, 096.9	All other diseases classified as infective and parasitic .. .. .	1,888	1,435	3,902	7,225
	122					
	132-134					
	136-138					
		<b>II.—NEOPLASMS.</b>				
A 44	140-148	Malignant neoplasm of buccal cavity and pharynx .. .. .	54	27	6	87
A 45	150	Malignant neoplasm of oesophagus .. .. .				
A 46	151	Malignant neoplasm of stomach .. .. .				
A 47	(a) 152	Malignant neoplasm of small intestine, including duodenum .. .. .				
	(b) 153	Malignant neoplasm of large intestine, except rectum .. .. .				
A 48	154	Malignant neoplasm of rectum .. .. .				
A 49	161	Malignant neoplasm of larynx .. .. .				
A 50	162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary ..				
A 51	170	Malignant neoplasm of breast .. .. .				
A 52	171	Malignant neoplasm of cervix uteri .. .. .				
		<i>Carried forward</i> ..	109,444	52,525	103,512	265,481

TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	109,444	52,525	103,512	265,481
		II.—NEOPLASMS—(cont.)				
A 53	172-174	Malignant neoplasm of other and unspecified parts of uterus .. ..				
A 54	177	Malignant neoplasm of prostate .. ..				
A 55	190-191	Malignant neoplasm of skin .. ..				
A 56	196-197	Malignant neoplasm of bone and connective tissue .. ..				
A 57	(a) 155-156	Malignant neoplasm of liver .. ..				
	(b) 157	Malignant neoplasm of pancreas .. ..				
	(c) 158	Malignant neoplasm of peritoneum .. ..				
	(d) 159	Malignant neoplasm of unspecified digestive organs .. ..	50	30	1	81
	(e) 175-176	Malignant neoplasm of other and unspecified female genital organs .. ..				
	(f) 178-179	Malignant neoplasm of other and unspecified male genital organs .. ..				
	(g) 180-181	Malignant neoplasm of kidney, bladder and other urinary organs .. ..				
	(h) 160	Malignant neoplasm of all other and unspecified sites .. ..	103	111	..	214
	164-165					
	192-195					
	198-199					
A 58	204	Leukaemia and Aleukaemia .. ..	1	2	11	14
A 59	(a) 200	Lymphosarcoma and reticulosarcoma ..				
	(b) 201	Hodgkin's disease .. ..				
	(c) 202-203	Other neoplasm of lymphatic and haematopoietic system .. ..				
A 60	(a) 210-211	Benign neoplasm of buccal cavity, pharynx and digestive system .. ..				
	(b) 217	Benign neoplasm of other female genital organs .. ..				
	(c) 218	Benign neoplasm of other male genital organs .. ..				
	(d) 212-216	Benign neoplasm of other and unspecified organs and tissue .. ..				
	219-229					
	(e) 230	Neoplasm of unspecified nature of digestive organs .. ..				
	(f) 233-235	Neoplasm of unspecified nature of other female genital organs .. ..				
	(g) 231-232	Neoplasm of unspecified nature of other unspecified organs .. ..	392	273	48	713
	236-239					
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES				
		AND				
		IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.				
A 61	250-251	Nontoxic goitre .. ..				
A 62	252	Thyrototoxicosis with or without goitre ..				
A 63	260	Diabetes mellitus .. ..				
A 64	(a) 280	Beri Beri .. ..	2,045	1,535	130	3,710
	(b) 281	Pellagra .. ..	18	16	1	35
	(c) 282	Scurvy .. ..	24	20	72	116
	(d) 283-284	Rickets .. ..	..	..	185	185
	(e) 285	Osteomalacia .. ..				
	(f) 286.0	(a) Sprue .. ..				
	286.5	(b) Malnutrition .. ..				
	286.1-286.4	(c) Other deficiency states .. ..	7,075	5,025	3,192	15,292
	286.6					
A 65	(a) 290	Pernicious and other hyperchromic anaemias ..				
	(b) 291	Iron deficiency anaemias (hypochromic) ..				
	(c) 292-293	Other specified and unspecified anaemias ..	20,042	34,442	9,950	64,434
A 66	(a) 241	Asthma .. ..	9,813	5,255	4,354	19,422
	(b) 240	Angioneurotic oedema, urticaria and other allergic disorders .. ..				
	242-245					
	(c) 253	Myxoedema and cretinism .. ..				
	(d) 254	Other diseases of thyroid gland .. ..				
	(e) 270	Disorders of pancreatic internal secretion other than diabetes mellitus .. ..				
	(f) 271	Diseases of parathyroid gland .. ..				
	(g) 272	Diseases of pituitary gland .. ..				
	(h) 273	Diseases of thymus gland .. ..				
	(i) 274	Diseases of adrenal gland .. ..				
		<i>Carried forward</i> ..	149,007	99,234	121,456	369,697



TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	149,007	99,234	121,456	369,697
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES AND IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS—(cont.)				
	(j) 275-277	Other diseases of endocrine glands .. ..				
	(k) 288	Gout .. ..				
	(l) 287, 289	Other metabolic diseases .. ..	1,186	1,001	390	2,577
	(m) 294	Polyeythemia .. ..				
	(n) 295	Haemophilia .. ..				
	(o) 296	Purpura and other haemorrhagic conditions..	32	25	1	58
	(p) 297	Agranuloeytosis .. ..				
	(q) 298	Diseases of spleen .. ..				
	(r) 299	Other diseases of blood and blood-forming organs .. ..	119	127	96	342
		V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.				
A 67	(a) 300	Schizophrenic disorders (dementia praecox) ..				
	(b) 301	Maniac-depressive reaction .. ..				
	(c) 302	Involutional melancholia .. ..				
	(d) 303	Paranoia and paranoid states .. ..				
	(e) 304	Senile psychoses .. ..				
	(f) 305-309	Other and unspecified psychoses .. ..				
A 68	(a) 311	Hysterical reaction .. ..				
	(b) 314	Neurotic-depressive reaction .. ..				
	(c) 322	Alcoholism .. ..	634	10	..	644
	(d) 323	Other drug addiction .. ..				
	(e) 310	Other psychoneuroses and disorders of personality .. ..				
	312-313					
	315-321					
	324					
	326					
A 69	325	Mental deficiency .. ..				
		VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.				
A 70	(a) 331	Cerebral haemorrhage .. ..				
	(b) 332	Cerebral embolism and thrombosis .. ..				
	(c) 330	Other vascular lesions affecting central nervous system .. ..				
	333-334					
A 71	340	Non-meningococcal meningitis .. ..				
A 72	345	Multiple sclerosis .. ..				
A 73	353	Epilepsy .. ..				
A 74	(a) 370	Conjunctivitis and ophthalmia .. ..				
	(b) 371-379	Other inflammatory diseases of eye .. ..				
A 75	385	Cataract .. ..				
A 76	387	Glaucoma .. ..				
A 77	(a) 390	Otitis externa .. ..				
	(b) 391-393	Otitis media and mastoiditis .. ..				
	(c) 394	Other inflammatory diseases of ear .. ..	12,460	5,547	12,190	30,197
A 78	(a) 380-384	All other diseases and conditions of eye ..	33,256	15,921	17,678	66,855
	386, 388					
	389					
	(b) 342	Intracranial and intraspinal abscess .. ..				
	(c) 343	Encephalitis, myelitis and encephalomyelitis				
	(d) 350	Paralysis agitans .. ..				
	(e) 352	Other cerebral paralysis .. ..				
	(f) 356	Motor neurone disease and muscular atrophy				
	(g) 357	Other diseases of spinal cord .. ..				
	(h) 366	Other and unspecified forms of neuralgia and neuritis .. ..				
	(i) 367	Other diseases of cranial nerves .. ..				
	(j) 369	Diseases of peripheral autonomic nervous system .. ..				
	(k) 341, 344	All other diseases of the nervous system and sense organs .. ..				
	351, 354					
	355					
	360-365		35,083	15,635	1,807	52,525
	368					
	395-398					
		<i>Carried forward</i> ..	231,777	137,500	153,618	522,895

TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	231,777	137,500	153,618	522,895
		<b>VII.—DISEASES OF THE CIRCULATORY SYSTEM.</b>				
A 79	(a) 400	Rheumatic fever without mention of heart involvement ..				
	(b) 401	Rheumatic fever with heart involvement ..				
	(c) 402	Chorea ..				
A 80	(a) 410-413	Diseases of valves specified as rheumatic ..				
	(b) 414	Other endocarditis specified as rheumatic ..				
	(c) 415	Other myocarditis specified as rheumatic ..				
	(d) 416	Other heart disease specified as rheumatic ..				
A 81	(a) 420	Arteriosclerotic heart disease, including coronary disease ..				
	(b) 421	Chronic endocarditis not specified as rheumatic ..				
	(c) 422	Other myocardial degeneration ..				
A 82	(a) 430	Acute and subacute endocarditis ..				
	(b) 431	Acute myocarditis ..				
	(c) 432	Acute pericarditis ..				
	(d) 433	Functional disease of heart ..				
	(e) 434	Other and unspecified diseases of heart ..	1,036	675	57	1,768
A 83	440-443	Hypertension with heart disease ..				
A 84	444-447	Hypertension without mention of heart ..	579	287	14	880
A 85	(a) 450	General arteriosclerosis ..				
	(b) 451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm ..				
	(c) 452	Other aneurysm, except of heart and aorta ..				
	(d) 453	Peripheral vascular disease ..				
	(e) 454	Arterial embolism and thrombosis ..				
	(f) 455	Gangrene of unspecified cause ..				
	(g) 456	Other diseases of arterics ..				
A 86	(a) 460, 462	Varicose veins ..				
	(b) 461	Haemorrhoids ..				
	(c) 463-464	Phlebitis and thrombophlebitis ..				
	(d) 465	Pulmonary embolism and infarction ..				
	(e) 466	Other venous embolism and thrombosis ..				
	(f) 467	Other diseases of circulatory system ..	1,755	619	110	2,484
	(g) 468	(a) Adenitis ..	10,403	2,715	4,407	17,525
		(b) Lymphadenitis ..	433	134	148	715
		(c) Other diseases of lymph nodes and lymph channels ..	577	185	236	998
		<b>VIII.—DISEASES OF THE RESPIRA- TORY SYSTEM.</b>				
A 87	(a) 470	Acute nasopharyngitis (common cold) ..				
	(b) 471	Acute sinusitis ..				
	(c) 472	Acute pharyngitis ..				
	(d) 473	Acute tonsillitis ..				
	(e) 474	Acute laryngitis and tracheitis ..				
	(f) 475	Other acute upper respiratory infections ..	12,722	5,729	6,205	24,656
A 88	(a) 480	Influenza with pneumonia ..				
	(b) 481	Influenza with other respiratory manifesta- tions, and influenza unqualified ..	54,067	17,971	22,995	95,033
	(c) 482	Influenza with digestive manifestations, but without respiratory symptoms ..				
	(d) 483	Influenza with nervous manifestations, but without digestive or respiratory symptoms ..				
A 89	490	Lobar pneumonia ..				
A 90	491	Bronchio-pneumonia ..				
A 91	492-493	Primary atypical, other and unspecified pneumonia ..	512	254	1,783	2,549
A 92	500	Acute bronchitis ..				
A 93	(a) 501	Bronchitis unqualified ..	80,350	39,772	92,724	212,999
	(b) 502	Chronic bronchitis ..				
A 94	510	Hypertrophy of tonsils and adenoids ..				
A 95	(a) 518	Empyema ..				
	(b) 521	Abscess of lung ..				
A 96	519	Pleurisy ..	190	60	1	251
		<i>Carried forward</i> ..	394,554	205,901	232,298	882,753



TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	394,554	205,901	282,298	882,753
		VIII.—DISEASES OF THE RESPIRATORY SYSTEM—(cont.)				
A 97	(a) 517	Other diseases of upper respiratory tract ..				
	(b) 520	Spontaneous pneumothorax .. ..				
	(c) 522	Pulmonary congestion and hypostasis ..				
	(d) 525	Other chronic interstitial pneumonia ..				
	(e) 523	Pneumoconiosis .. ..				
	(f) 526	Bronchiectasis .. ..				
	(g) 511-516	All other respiratory diseases .. ..	4,897	3,441	6,432	14,770
	524					
	527					
		IX.—DISEASES OF THE DIGESTIVE SYSTEM.				
A 98	(a) 530	Dental caries .. ..				
	(b) 531-535	(a) Gingivitis .. ..				
		(b) Pyorrhoea .. ..				
		(c) Other diseases of teeth and supporting structures .. ..	19,947	9,681	13,259	42,887
A 99	540	Ulcer of stomach .. ..				
A 100	541	Ulcer of duodenum .. ..				
A 101	543	Gastritis and duodenitis .. ..	23,990	14,460	7,453	45,903
A 102	550-553	Appendicitis .. ..	104	59	9	172
A 103	(a) 560	Hernia of abdominal cavity without mention of obstruction .. ..	340	18	34	392
	(b) 561	Hernia of abdominal cavity with obstruction .. ..				
	(c) 570	(a) Intussusception .. ..				
		(b) Volvulus .. ..				
		(c) Other intestinal obstruction .. ..				
A 104	(a) 571.0	Gastro-enteritis and colitis between 4 weeks and 2 years .. ..			12,518	12,518
	(b) 571.1	Gastro-enteritis and colitis, ages 2 years and over .. ..	13,236	6,068	8,589	27,893
	(c) 572	Chronic enteritis and ulcerative colitis .. ..				
A 105	(a) 581.0	Cirrhosis of liver without mention of alcoholism .. ..				
	(b) 581.1	Cirrhosis of liver with alcoholism .. ..				
A 106	(a) 584	Cholelithiasis .. ..				
	(b) 585	Cholecystitis without mention of calculi .. ..				
A 107	(a) 586	Stomatitis .. ..				
	(b) 588	Other diseases of buccal cavity .. ..				
	(c) 589	(a) Functional disorders of oesophagus .. ..				
		(b) Stricture or obstruction of oesophagus .. ..				
	(d) 544	Disorders of function of stomach .. ..				
	(e) 545	Other diseases of stomach and duodenum .. ..				
	(f) 573	(a) Constipation .. ..	31,823	12,722	10,602	55,147
		(b) Other functional disorders of intestines .. ..	2,743	1,484	921	5,148
	(g) 574	Anal fissure and fistula .. ..				
	(h) 575	Abscess of anal and rectal regions .. ..				
	(i) 576	Peritonitis .. ..				
	(j) 578	Other diseases of intestines and peritoneum .. ..				
	(k) 580	(a) Acute yellow atrophy of liver .. ..				
		(b) Degeneration of liver .. ..				
		(c) Hepatitis .. ..				
	(l) 583	Other diseases of liver .. ..				
	(m) 586	Other diseases of gall-bladder and biliary ducts .. ..				
	(n) 587	Diseases of pancreas .. ..				
	(o) 537, 542 } 577, 582 }	Other diseases of digestive system .. ..	8,366	5,277	3,143	16,786
		X.—DISEASES OF THE GENITO-URINARY SYSTEM.				
A 108	590	Acute nephritis .. ..				
A 109	(a) 591	Nephritis with oedema, including nephrosis .. ..				
	(b) 592	Chronic nephritis .. ..				
	(c) 593	Nephritis not specified as acute or chronic .. ..				
	(d) 594	Other renal sclerosis .. ..				
A 110	600	Infections of kidney .. ..				
A 111	(a) 602	Calculi of kidney and ureter .. ..				
		<i>Carried forward</i> ..	500,000	259,111	345,258	1,104,369

TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	500,000	259,111	345,258	1,104,369
		<b>X.—DISEASES OF THE GENITO- URINARY SYSTEM—(cont.)</b>				
A 112	(b) 604	Calculi of other parts of urinary system ..				
A 113	610	Hyperplasia of prostate .. ..				
A 114	620-621	Diseases of breast .. ..				
	(a) 603	Other diseases of kidney and ureter ..				
	(b) 605	Cystitis .. ..				
	(c) 606	Other diseases of bladder .. ..				
	(d) 608	Stricture of urethra .. ..				
	(e) 609	Other diseases of urethra .. ..				
	(f) 612	Other diseases of prostate .. ..				
	(g) 613	Hydrocele .. ..				
	(h) 614	Orchitis and epididymitis .. ..				
	(i) 617	Other diseases of male genital organs ..				
	(j) 622	Acute salpingitis and oophoritis .. ..				
	(k) 625	Other diseases of ovary and fallopian tube ..				
	(l) 626	Diseases of parametrium and pelviperitoneum (female) .. ..				
	(m) 630	Infective disease of uterus, vagina and vulva				
	(n) 633	Other diseases of uterus .. ..				
	(o) 634	Disorders of menstruation .. ..				
	(p) 637	Other diseases of female genital organs ..				
	(q) 601					
	607, 611	All other diseases of the genito-urinary system .. ..	6,328	7,231	1,029	14,588
	615-616					
	623-624					
	631-632					
	635-636					
		<b>XI.—DELIVERIES AND COMPLICA- TIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM.</b>				
A 115	(a) 640	Pyelitis and pyelonephritis of pregnancy ..				
	(b) 641	Other infections of genito-urinary tract during pregnancy .. ..				
	(c) 681	Sepsis of childbirth and the puerperium ..				
	(d) 682	Puerperal phlebitis and thrombosis .. ..				
	(e) 684	Puerperal pulmonary embolism .. ..				
A 116	(a) 642	(a) Albuminuria of pregnancy .. ..				
		(b) Eclampsia of pregnancy .. ..				
		(c) Hyperemesis gravidarum .. ..				
		(d) Acute yellow atrophy of liver .. ..				
		(e) Other toxæmias of pregnancy .. ..				
	(b) 652	Abortion with toxæmia, without mention of sepsis .. ..				
	(c) 685	Puerperal eclampsia .. ..				
	(d) 686	Other forms of puerperal toxæmia .. ..				
A 117	(a) 643	Placenta prævia .. ..				
	(b) 644	Other hæmorrhage of pregnancy .. ..				
	(c) 670	Delivery complicated by placenta prævia or antepartum hæmorrhage .. ..				
	(d) 671	Delivery complicated by retained placenta ..				
	(e) 672	Delivery complicated by other postpartum hæmorrhage .. ..				
A 118	650	Abortion without mention of sepsis or toxæmia .. ..				
A 119	651	Abortion with sepsis .. ..				
A 120	(a) 645	Ectopic pregnancy .. ..				
	(b) 646	Anaemia of pregnancy .. ..				
	(c) 683	Pyrexia of unknown origin during the puerperium .. ..				
	(d) 688.1	Puerperal psychoses .. ..				
	(e) 689	Mastitis and other disorders of lactation ..				
	(f) 647-649	Other complications of pregnancy, childbirth and the puerperium .. ..	..	15,033	..	15,033
	673-680					
	687					
	688.0					
	688.2-688.3					
	(g) 660	Delivery without complications .. ..				
		<i>Carried forward</i> ..	506,328	281,375	346,287	1,133,990



TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	506,323	281,375	346,287	1,133,990
		XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE				
		AND				
		XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.				
A 121	(a) 690	Boil and carbuncle .. .. .				
	(b) 691-693	Cellulitis and abscess .. .. .				
	(c) 694-698	Other infections of skin and subcutaneous tissue .. .. .	114,906	38,303	56,883	210,097
A 122	(a) 720	Acute arthritis due to pyogenic organisms ..				
	(b) 721	Acute nonpyogenic arthritis .. .. .				
	(c) 722	Rheumatoid arthritis and allied conditions ..				
	(d) 723-725	Arthritis specified and unspecified .. .. .				
A 123	(a) 726	Muscular rheumatism .. .. .				
	(b) 727	Rheumatism unspecified .. .. .	14,831	5,339	281	20,454
A 124	730	Osteomyelitis and periostitis .. .. .				
A 125	(a) 737	Ankylosis of joint .. .. .				
	(b) 745-749	Other acquired musculoskeletal deformities ..				
A 126	(a) 715	Chronic ulcer of skin (including tropical ulcer)				
	(b) 700-714 } 716 }	All other diseases of skin .. .. .				
	(c) 731-736 } 738-744 }	All other diseases of musculoskeletal system..	11,534	4,688	423	16,645
		XIV.—CONGENITAL MALFORMATIONS.				
A 127	751	Spine bifida and meningocele .. .. .				
A 128	754	Congenital malformations of circulatory system .. .. .				
A 129	(a) 750	Monstrosity .. .. .				
	(b) 752	Congenital hydrocephalus .. .. .				
	(c) 753	Other congenital malformations of nervous system and sense organs .. .. .				
	(d) 755	Cleft palate and harelip .. .. .				
	(e) 756	(a) Congenital hypertrophic pyloric stenosis				
		(b) Imperforate anus .. .. .				
		(c) Other congenital malformations of digestive system .. .. .				
	(f) 757	Congenital malformations of genito-urinary system .. .. .				
	(g) 758	Congenital malformations of bone and joint ..				
	(h) 759	Other and unspecified congenital malforma- tions, not elsewhere classified .. .. .	15	21	..	36
		XV.—CERTAIN DISEASES OF EARLY INFANCY.				
A 130	(a) 760	Intracranial and spinal injury at birth ..				
	(b) 761	Other birth injury .. .. .				
A 131	762	Postnatal asphyxia and atelectasis .. .. .				
A 132	(a) 764	Diarrhoea of newborn .. .. .				
	(b) 765	Ophthalmia neonatorum .. .. .				
	(c) 763	Pneumonia of newborn .. .. .				
	(d) 766	Pemphigus neonatorum .. .. .				
	(e) 767	Umbilical sepsis .. .. .				
	(f) 768	Other sepsis of newborn .. .. .				
A 133	770	Haemolytic disease of newborn .. .. .				
A 134	769	All other defined diseases of early infancy ..				
	771-772 }					
A 135	(a) 773	Congenital debility .. .. .				
	(b) 774	Premature birth .. .. .				
	(c) 775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified ..	..	..	376	376
		<i>Carried forward</i> ..	647,617	329,726	404,255	1,381,598

TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	647,617	329,726	404,255	1,381,598
		<b>XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.</b>				
A 136	794	Senility without mention of psychoses ..	2,846	2,226	..	5,072
A 137 (a)	780	Infantile convulsions .. .. .	..	..	348	348
(b)	788.8	Pyrexia of unknown origin .. .. .				
(c)	793	Observation, without need for further medical care .. .. .				
(d)	781-787 789-792 795 788.1-788.7 788.9	(a) Malingering .. .. .	243	414	..	657
		(b) Sudden death (cause unknown) ..				
		(c) Found dead (cause unknown) .. ..				
		(d) Other ill-defined and unknown causes of morbidity and mortality .. ..	13,391	5,297	6,928	25,616
		<b>XVII.—ACCIDENTS, POISONINGS AND VIOLENCE.</b>				
		<b>"E" CODE : ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES).</b>				
AE 138	E 810-E 835	Motor vehicle accidents .. .. .	2,115	487	433	3,035
AE 139 (a)	E 800-E 802	Railway accidents .. .. .	152	3	5	160
(b)	E 850-E 858	Water transport accidents .. .. .	1	..	..	1
(c)	E 860-E 866	Aircraft accidents .. .. .				
(d)	E 840-E 845	Other transport accidents .. .. .	1,543	631	974	3,148
AE 140 (a)	E 870	Accidental poisoning by morphia and other opium derivatives .. .. .				
(b)	E 874	Accidental poisoning by other analgesic and soporific drugs .. .. .				
(c)	E 878	Accidental poisoning by other and unspecified drugs .. .. .				
(d)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalies .. .. .				
(e)	E 884	Accidental poisoning by mercury and its compounds .. .. .				
(f)	E 885	Accidental poisoning by lead and its compounds .. .. .				
(g)	E 886	Accidental poisoning by arsenic and antimony and their compounds .. .. .				
(h)	E 888	Accidental poisoning by other and unspecified solid or liquid substances .. .. .				
(i)	E 890-E 895	Accidental poisoning by gases and vapours ..	2	..	1	3
(j)	E 871-E 873 E 875-E 877 E 879-E 882 E 887	Other accidental poisoning .. .. .	..	6	9	15
AE 141	E 900-E 904	Accidental falls .. .. .	37,664	8,617	13,545	59,826
AE 142	E 912	Accident caused by machinery .. .. .	243	29	29	301
AE 143	E 916	Accident caused by fire and explosion of combustible material .. .. .				
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation .. .. .				
AE 145	E 919	Accident caused by firearm .. .. .	226	29	20	275
AE 146	E 929	Accidental drowning and submersion ..	..	..	3	3
AE 147 (a)	E 920	Foreign body entering eye and adnexa ..				
(b)	E 923	Foreign body entering other orifice .. ..				
(c)	E 927	Accidents caused by bites and stings of venomous animals and insects .. ..	1,828	633	781	3,242
(d)	E 928	Other accidents caused by animals .. ..	1,616	722	1,030	3,368
AE 148 (a)	E 913	Accidents caused by cutting or piercing instruments .. .. .	14,390	3,641	4,691	22,722
(b)	E 914	Accidents caused by electric current .. ..	6	..	..	6
(c)	E 925	Accidental mechanical suffocation .. ..				
(d)	E 926	Lack of care of infants under 1 year of age ..				
(e)	E 931	Excessive heat .. .. .				
(f)	E 932	Excessive cold .. .. .				
(g)	E 933	Hunger, thirst and exposure .. .. .	3	..	..	3
(h)	E 934	Cataclysm .. .. .				
		<i>Carried forward</i> ..	723,886	352,461	433,052	1,509,399



TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	723,886	352,461	433,052	1,509,399
		XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(cont.)				
		“ E ” CODE : ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(cont.)				
(i)	E 935	Lightning ..				
(j)	E 936	(a) Accidents in mines and quarries ..	283	66	..	349
		(b) Agricultural and forestry accidents ..	462	140	63	665
		(c) Accidental injury by crushing or landslide ..				
		(d) Other and unspecified accidents ..				
(k)	E 940	Generalized vaccinia following vaccination ..	8	1	71	80
(l)	E 941-E 942	Other complications of smallpox vaccination ..	20	23	472	520
(m)	E 954	Anaesthetic accidents ..				
(n)	E 950-E953 } E 955-E959 }	Accidents due to medical or surgical intervention ..				
(o)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances ..				
(p)	E 971	Suicide and self-inflicted injury by other solid and liquid substances ..	3	3	..	6
(q)	E 972	Suicide and self-inflicted injury by gases in domestic use ..				
(r)	E 973	Suicide and self-inflicted injury by other gases ..				
(s)	E 974	Suicide and self-inflicted injury by hanging or strangulation ..				
(t)	E 975	Suicide and self-inflicted injury by submersion (drowning) ..				
(u)	E 976	Suicide and self-inflicted injury by firearms and explosives ..				
(v)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..				
(w)	E 978	Suicide and self-inflicted injury by jumping from high place ..				
(x)	E 979	Suicide and self-inflicted injury by other and unspecified means ..	5	2	..	7
(y)	E 910-E911 } E 915 } E 921-E922 } E 924-E930 } E 943-E946 } E 960-E965 }	All other accidental causes ..	714	247	307	1,268
AE 149	(a) E 980	Non-accidental poisoning by another person ..				
	(b) E 981	Assault by firearms and explosive ..	140	7	2	149
	(c) E 982	Assault by cutting or piercing instruments ..	451	137	12	600
	(d) E 983	Assault by other means ..	2,698	869	100	3,667
	(e) E 984	Injury by intervention of police ..				
	(f) E 985	Execution (legal) ..				
AE 150	E 990-E 999	Injury resulting from operations of war ..				
		“ N ” CODE : ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING, AND VIOLENCE (NATURE OF INJURY).				
AN 138	N 800-N 804	Fracture of skull ..				
AN 139	N 805-N 809	Fracture of spine and trunk ..				
AN 140	N 810-N 829	Fracture of limbs ..				
AN 141	N 830-N 839	Dislocation without fracture ..				
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles ..				
AN 143	N 850-N 856	Head injury excluding fracture ..				
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis ..				
AN 145	N 870-N 908	Laceration and open wounds ..				
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..				
AN 147	N 930-N 936	Effects of foreign body entering through orifice ..				
AN 148	N 940-N 949	Burns ..	1,683	747	1,455	3,885
AN 149	N 960-N 979	Effects of poisons ..	548	86	105	739
AN 150	N950-N959 } N980-N999 }	All other and unspecified effects of external causes ..				
		TOTAL ..	730,901	354,794	435,639	1,521,334

TABLE 6—(cont.)

## OUT-PATIENTS—(cont.)

RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Nationalities.					New Cases. All Nationalities (including Europeans).			
					Adult Males.	Adult Females.	Children under 10 years.	Total. (A)
Europeans	..	..	..	..	5,584	2,506	1,389	9,479
Eurasians	..	..	..	..	5,177	3,481	2,830	11,488
Chinese	..	..	..	..	255,878	146,266	192,781	594,925
Indians	..	..	..	..	170,179	75,437	86,157	331,773
Malays	..	..	..	..	281,307	122,244	146,216	549,767
Javanese	..	..	..	..	9,186	2,919	4,405	16,510
Japanese	..	..	..	..	90	28	..	118
Others	..	..	..	..	3,500	1,913	1,861	7,274
TOTAL ..					730,901	354,794	435,639	1,521,334



TABLE 7.

## TRAVELLING DISPENSARIES OUT-PATIENTS.

RETURN OF DISEASES FOR THE YEAR 1951.

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		I.—INFECTIVE AND PARASITIC DISEASES.				
A 1	001-008	Tuberculosis of respiratory system .. ..	96	45	6	147
A 2	010	Tuberculosis of meninges and central nervous system.. ..				
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands .. ..				
A 4	012-013	Tuberculosis of bones and joints .. ..				
A 5	(a) 014	Tuberculosis of skin and subcutaneous cellular tissue .. ..				
	(b) 015	Tuberculosis of lymphatic system .. ..				
	(c) 016	Tuberculosis of genito-urinary system .. ..				
	(d) 017	Tuberculosis of adrenal glands .. ..				
	(e) 018	Tuberculosis of other organs .. ..	..	2	2	4
	(f) 019	Disseminated tuberculosis .. ..				
A 6	020	Congenital syphilis .. ..	..		1	1
A 7	(a) 021.0-021.1	Primary syphilis .. ..	29	8	6	43
	(b) 021.2	Secondary syphilis .. ..	11	6	..	17
	(c) 021.3	Early syphilis, relapse following treatment .. ..				
	(d) 021.4	Early syphilis (unspecified stage) .. ..				
A 8	024	Tabes dorsalis .. ..				
A 9	025	General paralysis of insane .. ..				
A 10	(a) 022	Aneurysm of aorta .. ..				
	(b) 023	Other cardiovascular syphilis .. ..				
	(c) 026	Other syphilis of central nervous system .. ..				
	(d) 027	Tertiary syphilis .. ..	21	12	..	33
	(e) 028	Latent syphilis .. ..				
	(f) 029	Syphilis unqualified .. ..	29	5	..	34
A 11	(a) 030	Acute or unspecified gonorrhoea .. ..				
	(b) 031	Chronic gonococcal infection of genito-urinary system.. ..	167	31	3	201
	(c) 032	Gonococcal infection of joint .. ..				
	(d) 033	Gonococcal infection of eye .. ..				
	(e) 034-035	Gonococcal infection of other sites .. ..	33	13	4	50
A 12	040	Typhoid fever .. ..				
A 13	(a) 041	Paratyphoid fever A, B or C .. ..				
	(b) 042	Other salmonella infections .. ..				
A 14	043	Cholera .. ..				
A 15	044	Brucellosis (undulant fever) .. ..				
A 16	(a) 045	Bacillary dysentery .. ..	77	25	62	164
	(b) 046	Amoebiasis .. ..	2	1	1	4
	(c) 047-048	Other protozoal and unspecified forms of dysentery .. ..	702	410	569	1,681
A 17	050	Scarlet fever .. ..				
A 18	051	Streptococcal sore throat .. ..				
A 19	052	Erysipelas .. ..				
A 20	053	Septicaemia and pyaemia .. ..				
A 21	055	Diphtheria .. ..				
A 22	056	Whooping Cough .. ..	7	5	329	341
A 23	057	Meningococcal infections .. ..				
A 24	058	Plague .. ..				
A 25	060	Leprosy .. ..	4	..	..	4
A 26	(a) 061	Tetanus of the new-born .. ..				
	(b) —	Tetanus, other forms .. ..				
A 27	062	Anthrax .. ..				
A 28	080	Acute Poliomyelitis .. ..	..	..	1	1
A 29	082	Acute infectious encephalitis .. ..				
A 30	081 } 083 }	Late effects of acute poliomyelitis and acute infectious encephalitis .. ..				
A 31	084	Smallpox .. ..				
A 32	085	Measles .. ..	88	96	211	395
A 33	091	Yellow fever .. ..				
A 34	092	Infectious hepatitis .. ..				
A 35	094	Rabies .. ..				
A 36	(a) 100	Louse-borne epidemic typhus .. ..				
	(b) 101	Flea-borne endemic typhus (murine).. ..				
	(c) 104	Tick-borne epidemic typhus .. ..				
	(d) 105	Mite-borne typhus .. ..				
	(e) 102-103 } 106-108 }	Other and unspecified typhus .. ..				
A 37	(a) 110	Vivax malaria (benign tertian) .. ..	145	55	93	293
	(b) 111	Malariae malaria (quartan) .. ..	2	1	1	4
	(c) 112	Falciparum malaria (malignant tertian) .. ..	228	106	144	478
		Carried forward ..	1,641	821	1,433	3,895

TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	1,641	821	1,433	3,895
		I.—INFECTIVE AND PARASITIC DISEASES—(cont.)				
	(d) 114	Mixed malaria infections .. ..				
	(e) 115	Blackwater fever .. ..				
	(f) 113	Other and unspecified forms of malaria ..	35,661	20,475	23,397	79,533
A 38	116-117					
	(a) 123.0	Schistosomiasis vesical ( <i>S. haematobium</i> ) ..				
	(b) 123.1	Schistosomiasis intestinal ( <i>S. Mansoni</i> ) ..				
	(c) 123.2	Schistosomiasis Pulmonary ( <i>S. japonicum</i> ) ..				
	(d) 123.3	Other and unspecified Schistosomiasis ..				
A 39	125	Hydatid disease .. ..				
A 40	127	Onchocerciasis .. ..				
	(b) —	Loiasis .. ..				
	(c) —	Filariasis ( <i>bancrofti</i> ) .. ..	39	13	15	67
	(d) —	Other filariasis .. ..				
A 41	129	Ankylostomiasis .. ..	1,542	1,064	1,204	3,810
A 42	(a) 126	Tape worm (infestation) and other cestode infestation .. ..				
	(b) 130.0	Ascariasis .. ..	6,316	4,516	28,622	39,454
	(c) 130.3	Guinea worm ( <i>dracunculosis</i> ) .. ..				
	(d) 124	Other trematode infestation .. ..				
	(e) 128	Trichiniasis .. ..				
A 43	(f) 130.1-130.2	Other diseases due to helminths .. ..	924	615	2,677	4,216
	(a) 036	Chancroid .. ..				
	(b) 037	Lymphogranuloma venereum .. ..				
	(c) 038	Granuloma inguinale, venereal .. ..				
	(d) 039	Other and unspecified venereal diseases ..				
	(e) 049	Food poisoning infection and intoxication ..	1	1	..	2
	(f) 059	Tularaemia .. ..				
	(g) 063	Gas gangrene .. ..				
	(h) 064	(a) Glanders .. ..				
		(b) Melioidosis .. ..				
		(c) Other bacterial diseases .. ..				
	(i) 070	Vincent's infection .. ..				
	(j) 071	Relapsing fever .. ..				
	(k) 072	Leptospirosis icterohaemorrhagica (Weil's disease) .. ..				
	(l) 073	Yaws .. ..	7,680	5,002	10,673	23,355
	(m) 086	Rubella .. ..				
	(n) 087	Chickenpox .. ..	13	9	106	128
	(o) 088	Herpes Zoster .. ..	20	9	14	43
	(p) 089	Mumps .. ..				
	(q) 090	Dengue .. ..				
	(r) 093	Glandular fever .. ..				
	(s) 095	Trachoma .. ..				
	(t) 096.7	Sandfly fever .. ..				
	(u) 120	Leishmaniasis .. ..				
	(v) 121	(a) Trypanosomiasis gambiensis .. ..				
		(b) Trypanosomiasis rhodsiensis .. ..				
		(c) Other and unspecified trypanosomiasis ..				
	(w) 131	Dermatophytosis .. ..	4,789	3,102	4,659	12,550
	(x) 135	Scabies .. ..				
	(y) 054, 074					
	096.1-096.6					
	096.8, 096.9	All other diseases classified as infective and parasitic .. ..	1,483	715	5,459	7,657
	122					
	132-134					
	136-138					
		II.—NEOPLASMS.				
A 44	140-148	Malignant neoplasm of buccal cavity and pharynx .. ..				
A 45	150	Malignant neoplasm of oesophagus .. ..				
A 46	151	Malignant neoplasm of stomach .. ..				
A 47	(a) 152	Malignant neoplasm of small intestine, including duodenum .. ..				
	(b) 153	Malignant neoplasm of large intestine, except rectum .. ..				
A 48	154	Malignant neoplasm of rectum .. ..				
A 49	161	Malignant neoplasm of larynx .. ..				
A 50	162-163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary				
A 51	170	Malignant neoplasm of breast .. ..				
A 52	171	Malignant neoplasm of cervix uteri .. ..				
		<i>Carried forward</i> ..	60,109	36,342	78,259	174,710



TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	60,109	36,342	78,259	174,710
		II.—NEOPLASMS—(cont.)				
A 53	172-174	Malignant neoplasm of other and unspecified parts of uterus .. ..				
A 54	177	Malignant neoplasm of prostate .. ..				
A 55	190-191	Malignant neoplasm of skin .. ..				
A 56	196-197	Malignant neoplasm of bone and connective tissue .. ..				
A 57	(a) 155-156	Malignant neoplasm of liver .. ..				
	(b) 157	Malignant neoplasm of pancreas .. ..				
	(c) 158	Malignant neoplasm of peritoneum .. ..				
	(d) 159	Malignant neoplasm of unspecified digestive organs .. ..				
	(e) 175-176	Malignant neoplasm of other and unspecified female genital organs .. ..				
	(f) 178-179	Malignant neoplasm of other and unspecified male genital organs .. ..				
	(g) 180-181	Malignant neoplasm of kidney, bladder and other urinary organs .. ..				
	(h) 160	Malignant neoplasm of all other and unspecified sites .. ..				
	164-165					
	192-195					
	198-199					
A 58	204	Leukaemia and Aleukaemia .. ..				
A 59	(a) 200	Lymphosarcoma and reticulosarcoma .. ..				
	(b) 201	Hodgkin's disease .. ..				
	(c) 202-203	Other neoplasm of lymphatic and haemato-poietic system .. ..				
A 60	(a) 210-211	Benign neoplasm of buccal-cavity, pharynx and digestive system .. ..				
	(b) 217	Benign neoplasm of other female genital organs .. ..				
	(c) 218	Benign neoplasm of other male genital organs .. ..				
	(d) 212-216	Benign neoplasm of other and unspecified organs and tissue .. ..				
	219-229					
	(e) 230	Neoplasm of unspecified nature of digestive organs .. ..				
	(f) 233-235	Neoplasm of unspecified nature of other female genital organs .. ..				
	(g) 231-232	Neoplasm of unspecified nature of other unspecified organs .. ..	..	1	..	1
	236-239					
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES				
		AND				
		IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.				
A 61	250-251	Nontoxic goitre .. ..				
A 62	252	Thyrotoxicosis with or without goitre .. ..				
A 63	260	Diabetes mellitus .. ..				
A 64	(a) 280	Beri Beri .. ..	444	361	29	834
	(b) 281	Pellagra .. ..	..	..	7	7
	(c) 282	Scurvy .. ..	..	..	71	71
	(d) 283-284	Rickets .. ..	..	..	71	71
	(e) 285	Osteomalacia .. ..	..	..	71	71
	(f) 286.0	(a) Sprue .. ..				
	286.5	(b) Malnutrition .. ..				
	286.1-286.4	(c) Other deficiency states .. ..	1,226	1,016	1,929	4,171
	286.6					
A 65	(a) 290	Pernicious and other hyperchromic anaemias .. ..				
	(b) 291	Iron deficiency anaemias (hypochromic) .. ..				
	(c) 292-293	Other specified and unspecified anaemias .. ..	9,062	12,867	8,409	30,338
A 66	(a) 241	Asthma .. ..	2,474	1,410	1,316	5,200
	(b) 240	Angioneurotic oedema, urticaria and other allergic disorders .. ..				
	242-245					
	(c) 253	Myxoedema and cretinism .. ..				
	(d) 254	Other diseases of thyroid gland .. ..				
	(e) 270	Disorders of pancreatic internal secretion other than diabetes mellitus .. ..				
	(f) 271	Diseases of parathyroid gland .. ..				
	(g) 272	Diseases of pituitary gland .. ..				
	(h) 273	Diseases of thymus gland .. ..				
		<i>Carried forward</i> ..	73,315	51,997	90,020	215,332

TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	73,315	51,997	90,020	215,332
		III.—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES				
		AND				
		IV.—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS—(cont.)				
(i)	274	Diseases of adrenal gland .. .. .				
(j)	275-277	Other diseases of endocrine glands .. .. .				
(k)	288	Gout .. .. .				
(l)	287, 289	Other metabolic diseases .. .. .	112	101	23	236
(m)	294	Polycythemia .. .. .				
(n)	295	Haemophilia .. .. .				
(o)	296	Purpura and other haemorrhagic conditions .. .. .				
(p)	297	Agranulocytosis .. .. .				
(q)	298	Diseases of spleen .. .. .				
(r)	299	Other diseases of blood and blood-forming organs .. .. .	20	12	26	58
		V.—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.				
A 67	(a)	Schizophrenic disorders (dementia praecox) ..				
	(b)	Maniac-depressive reaction .. .. .				
	(c)	Involutional melancholia .. .. .				
	(d)	Paranoia and paranoid states .. .. .				
	(e)	Senile psychoses .. .. .				
	(f)	Other and unspecified psychoses .. .. .				
A 68	(a)	Hysterical reaction .. .. .				
	(b)	Neurotic-depressive reaction .. .. .				
	(c)	Alcoholism .. .. .				
	(d)	Other drug addiction .. .. .				
	(e)	310				
		312-313				
		315-321				
		324				
		326				
A 69		325				
		Mental deficiency .. .. .				
		VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.				
A 70	(a)	Cerebral haemorrhage .. .. .				
	(b)	Cerebral embolism and thrombosis .. .. .				
	(c)	Other vascular lesions affecting central nervous system .. .. .				
A 71		333-334				
A 72		340				
A 73		345				
A 74	(a)	353				
	(b)	370				
		371-379				
A 75		385				
A 76		387				
A 77	(a)	390				
	(b)	391-393				
	(c)	394				
A 78	(a)	380-384				
		386, 388				
		389				
	(b)	342				
	(c)	343				
	(d)	350				
	(e)	352				
	(f)	356				
	(g)	357				
	(h)	366				
		All other diseases and conditions of eye ..	1,852	1,322	5,502	8,676
		Intracranial and intraspinal abscess .. .. .				
		Encephalitis, myelitis and encephalomyelitis .. .. .				
		Paralysis agitans .. .. .				
		Other cerebral paralysis .. .. .				
		Motor neurone disease and muscular atrophy .. .. .				
		Other diseases of spinal cord .. .. .				
		Other and unspecified forms of neuralgia and neuritis .. .. .				
		<i>Carried forward</i> ..	83,786	60,408	106,586	250,780



TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	83,786	60,408	106,586	250,780
		VI.—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS—(cont.)				
	(i) 367	Other diseases of cranial nerves .. ..				
	(j) 369	Diseases of peripheral autonomic nervous system.. .. .				
	(k) 341, 344 351, 354 355 360-365 368 395-398	All other diseases of the nervous system and sense organs .. .. .	16,717	12,313	3,299	32,329
		VII.—DISEASES OF THE CIRCULATORY SYSTEM.				
A 79	(a) 400	Rheumatic fever without mention of heart involvement .. .. .				
	(b) 401	Rheumatic fever with heart involvement ..				
	(c) 402	Chorea .. .. .				
A 80	(a) 410-413	Diseases of valves specified as rheumatic ..				
	(b) 414	Other endocarditis specified as rheumatic ..				
	(c) 415	Other myocarditis specified as rheumatic ..				
	(d) 416	Other heart disease specified as rheumatic ..				
A 81	(a) 420	Arteriosclerotic heart disease, including coronary disease .. .. .				
	(b) 421	Chronic endocarditis not specified as rheumatic .. .. .				
	(c) 422	Other myocardial degeneration .. .. .				
A 82	(a) 430	Acute and subacute endocarditis .. .. .				
	(b) 431	Acute myocarditis .. .. .				
	(c) 432	Acute pericarditis .. .. .				
	(d) 433	Functional disease of heart .. .. .				
	(e) 434	Other and unspecified diseases of heart ..	9	3	1	13
A 83	440-443	Hypertension with heart disease .. .. .				
A 84	444-447	Hypertension without mention of heart ..	1	..	..	1
A 85	(a) 450	General arteriosclerosis .. .. .				
	(b) 451	Aortic aneurysm specified as non-syphilitic and dissecting aneurysm .. .. .				
	(c) 452	Other aneurysm, except of heart and aorta ..				
	(d) 453	Peripheral vascular disease .. .. .				
	(e) 454	Arterial embolism and thrombosis .. .. .				
	(f) 455	Gangrene of unspecified cause .. .. .				
	(g) 456	Other diseases of arteries .. .. .				
A 86	(a) 460, 462	Varicose veins .. .. .				
	(b) 461	Haemorrhoids .. .. .				
	(c) 463-464	Phlebitis and thrombophlebitis .. .. .				
	(d) 465	Pulmonary embolism and infarction .. ..				
	(e) 466	Other venous embolism and thrombosis ..				
	(f) 467	Other diseases of circulatory system .. ..	77	41	34	152
	(g) 468	(a) Adenitis .. .. .	802	401	687	1,890
		(b) Lymphadenitis .. .. .	8	2	2	12
		(c) Other diseases of lymph nodes and lymph channels .. .. .	71	30	47	148
		VIII.—DISEASES OF THE RESPIRA- TORY SYSTEM.				
A 87	(a) 470	Acute nasopharyngitis (common cold) ..				
	(b) 471	Acute sinusitis .. .. .				
	(c) 472	Acute pharyngitis .. .. .				
	(d) 473	Acute tonsillitis .. .. .				
	(e) 474	Acute laryngitis and tracheitis .. .. .				
	(f) 475	Other acute upper respiratory infections ..	752	465	725	1,942
A 88	(a) 480	Influenza with pneumonia .. .. .				
	(b) 481	Influenza with other respiratory manifesta- tions, and influenza unqualified .. .. .	8,427	5,116	7,942	21,485
	(c) 482	Influenza with digestive manifestations, but without respiratory symptoms .. .. .				
		<i>Carried forward</i> ..	110,650	78,779	119,323	308,752

TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	110,650	78,779	119,323	308,752
		VIII.—DISEASES OF THE RESPIRATORY SYSTEM—(cont.)				
	(d) 483	Influenza with nervous manifestations, but without digestive or respiratory symptoms				
A 89	490	Lobar pneumonia .. .. .				
A 90	491	Broncho-pneumonia .. .. .				
A 91	492-493	Primary atypical, other and unspecified pneumonia .. .. .	38	32	83	153
A 92	500	Acute bronchitis .. .. .				
A 93	(a) 501	Bronchitis unqualified .. .. .	25,110	15,115	31,265	71,490
	(b) 502	Chronic bronchitis .. .. .				
A 94	510	Hypertrophy of tonsils and adenoids ..				
A 95	(a) 518	Empyema .. .. .				
	(b) 521	Abscess of lung .. .. .				
A 96	519	Pleurisy .. .. .	6	4	..	10
A 97	(a) 517	Other diseases of upper respiratory tract ..				
	(b) 520	Spontaneous pneumothorax .. .. .				
	(c) 522	Pulmonary congestion and hypostasis ..				
	(d) 525	Other chronic interstitial pneumonia ..				
	(e) 523	Pneumoconiosis .. .. .				
	(f) 526	Bronehiectasis .. .. .				
	(g) 511-516 } 524 } 527 }	All other respiratory diseases .. .. .	402	203	495	1,100
		IX.—DISEASES OF THE DIGESTIVE SYSTEM.				
A 98	(a) 530	Dental caries .. .. .				
	(b) 531-535	(a) Gingivitis .. .. .				
		(b) Pyorrhoea .. .. .				
		(c) Other diseases of teeth and supporting structures .. .. .	2,854	2,130	3,899	8,883
A 99	540	Uleer of stomach .. .. .				
A 100	541	Ulcer of duodenum .. .. .				
A 101	543	Gastritis and duodenitis .. .. .	4,231	4,118	3,628	11,977
A 102	550-553	Appendicitis .. .. .				
A 103	(a) 560	Hernia of abdominal cavity without mention of obstruction .. .. .				
	(b) 561	Hernia of abdominal cavity with obstruction ..				
	(c) 570	(a) Intussusception .. .. .				
		(b) Volvulus .. .. .				
		(c) Other intestinal obstruction .. .. .				
A 104	(a) 571.0	Gastro-enteritis and colitis between 4 weeks and 2 years .. .. .	..	..	2,187	2,187
	(b) 571.1	Gastro-enteritis and colitis, ages 2 years and over .. .. .	2,737	1,705	2,459	6,901
	(c) 572	Chronic enteritis and ulcerative colitis ..				
A 105	(a) 581.0	Cirrhosis of liver without mention of alcoholism ..				
	(b) 581.1	Cirrhosis of liver with alcoholism .. .. .				
A 106	(a) 584	Cholelithiasis .. .. .				
	(b) 585	Cholecystitis without mention of calculi ..				
A 107	(a) 536	Stomatitis .. .. .				
	(b) 538	Other diseases of buccal cavity .. .. .				
	(c) 539	(a) Functional disorders of oesophagus ..				
		(b) Stricture or obstruction oesophagus ..				
	(d) 544	Disorders of function of stomach .. .. .				
	(e) 545	Other diseases of stomach and duodenum ..				
	(f) 573	(a) Constipation .. .. .	12,641	6,915	6,871	26,427
		(b) Other functional disorders of intestines ..	834	565	560	1,959
	(g) 574	Anal fissure and fistula .. .. .				
	(h) 575	Abscess of anal and rectal regions .. .. .				
	(i) 576	Peritonitis .. .. .				
	(j) 578	Other diseases of intestines and peritoneum ..				
	(k) 580	(a) Acute yellow atrophy of liver .. .. .				
		(b) Degeneration of liver .. .. .				
		(c) Hepatitis .. .. .				
	(l) 583	Other diseases of liver .. .. .				
	(m) 586	Other diseases of gall-bladder and biliary ducts ..				
	(n) 587	Diseases of pancreas .. .. .				
	(o) 537, 542 } 577, 582 }	Other diseases of digestive system .. .. .	1,148	728	607	2,483
		<i>Carried forward</i> ..	160,651	110,294	171,377	442,322



TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	160,651	110,294	171,377	442,322
		<b>X.—DISEASES OF THE GENITO- URINARY SYSTEM.</b>				
A 108	590	Acute nephritis ..				
A 109	(a) 591	Nephritis with oedema, including nephrosis ..				
	(b) 592	Chronic nephritis ..				
	(c) 593	Nephritis not specified as acute or chronic ..				
	(d) 594	Other renal sclerosis ..				
A 110	600	Infections of kidney ..				
A 111	(a) 602	Caleuli of kidney and ureter ..				
	(b) 604	Caleuli of other parts of urinary system ..				
A 112	610	Hyperplasia of prostate ..				
A 113	620-621	Diseases of breast ..				
A 114	(a) 603	Other diseases of kidney and ureter ..				
	(b) 605	Cystitis ..				
	(c) 606	Other diseases of bladder ..				
	(d) 608	Stricture of urethra ..				
	(e) 609	Other diseases of urethra ..				
	(f) 612	Other diseases of prostate ..				
	(g) 613	Hydrocele ..				
	(h) 614	Orethritis and epididymitis ..				
	(i) 617	Other diseases of male genital organs ..				
	(j) 622	Acute salpingitis and oophoritis ..				
	(k) 625	Other diseases of ovary and fallopian tube ..				
	(l) 626	Diseases of parametrium and pelviperitoneum (female) ..				
	(m) 630	Infective disease of uterus, vagina and vulva ..				
	(n) 633	Other diseases of uterus ..				
	(o) 634	Disorders of menstruation ..				
	(p) 637	Other diseases of female genital organs ..				
	(q) 601					
	607, 611	All other diseases of the genito-urinary system	452	460	203	1,115
	615-616					
	623-624					
	631-632					
	635-636					
		<b>XI.—DELIVERIES AND COMPLICA- TIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM.</b>				
A 115	(a) 640	Pyelitis and pyelonephritis of pregnancy ..				
	(b) 641	Other infections of genito-urinary tract during pregnancy ..				
	(c) 681	Sepsis of childbirth and the puerperium ..				
	(d) 682	Puerperal phlebitis and thrombosis ..				
	(e) 684	Puerperal pulmonary embolism ..				
A 116	(a) 642	(a) Albuminuria of pregnancy ..				
		(b) Eclampsia of pregnancy ..				
		(c) Hyperemesis gravidarum ..				
		(d) Acute yellow atrophy of liver ..				
		(e) Other toxæmias of pregnancy ..				
	(b) 652	Abortion with toxæmia, without mention of sepsis ..				
	(c) 685	Puerperal eclampsia ..				
	(d) 686	Other forms of puerperal toxæmia ..				
A 117	(a) 643	Placenta prævia ..				
	(b) 644	Other hæmorrhage of pregnancy ..				
	(c) 670	Delivery complicated by placenta prævia or ante-partum hæmorrhage ..				
	(d) 671	Delivery complicated by retained placenta ..				
	(e) 672	Delivery complicated by other postpartum hæmorrhage ..				
A 118	650	Abortion without mention of sepsis or toxæmia ..				
A 119	651	Abortion with sepsis ..				
A 120	(a) 645	Ectopic pregnancy ..				
	(b) 646	Anæmia of pregnancy ..				
	(c) 683	Pyrexia of unknown origin during the puerperium ..				
	(d) 688.1	Puerperal psychoses ..				
	(e) 689	Mastitis and other disorders of lactation ..				
	(f) 647-649	Other complications of pregnancy, childbirth and the puerperium ..	..	675	..	675
	673-680					
	687					
	688.0					
	688.2-688.3					
	(g) 660	Delivery without complications ..				
		<i>Carried forward</i> ..	161,103	111,429	171,580	444,112

TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	161,103	111,429	171,580	444,112
		<b>XII.—DISEASES OF THE SKIN AND CELLULAR TISSUE</b>				
		<b>AND</b>				
		<b>XIII.—DISEASES OF THE BONES AND ORGANS OF MOVEMENT.</b>				
A 121	(a) 690	Boil and carbuncle .. .. .				
	(b) 691-693	Cellulitis and abscess .. .. .				
	(c) 694-698	Other infections of skin and subcutaneous tissue .. .. .				
A 122	(a) 720	Acute arthritis due to pyogenic organisms ..				
	(b) 721	Acute nonpyogenic arthritis .. .. .				
	(c) 722	Rheumatoid arthritis and allied conditions ..				
	(d) 723-725	Arthritis specified and unspecified .. .. .				
A 123	(a) 726	Muscular rheumatism .. .. .				
	(b) 727	Rheumatism unspecified .. .. .	5,199	4,062	225	9,486
A 124	730	Osteomyelitis and periostitis .. .. .				
A 125	(a) 737	Ankylosis of joint .. .. .				
	(b) 745-749	Other acquired musculoskeletal deformities ..				
A 126	(a) 715	Chronic ulcer of skin (including tropical ulcer)				
	(b) 700-714 } 716 }	All other diseases of skin .. .. .	54,162	23,704	58,968	136,834
	(c) 731-736 } 738-744 }	All other diseases of musculoskeletal system ..	2,694	1,617	243	4,554
		<b>XIV.—CONGENITAL MALFORMATIONS.</b>				
A 127	751	Spine bifida and meningocele .. .. .				
A 128	754	Congenital malformations of circulatory system .. .. .				
A 129	(a) 750	Monstrosity .. .. .				
	(b) 752	Congenital hydrocephalus .. .. .				
	(c) 753	Other congenital malformations of nervous system and sense organs .. .. .				
	(d) 755	Cleft palate and harelip .. .. .				
	(e) 756	(a) Congenital hypertrophic pyloric stenosis ..				
		(b) Imperforate anus .. .. .				
		(c) Other congenital malformations of digestive system .. .. .				
	(f) 757	Congenital malformations of genito-urinary system .. .. .				
	(g) 758	Congenital malformations of bone and joint ..				
	(h) 759	Other and unspecified congenital malforma- tions, not elsewhere classified .. .. .				
		<b>XV.—CERTAIN DISEASES OF EARLY INFANCY.</b>				
A 130	(a) 760	Intracranial and spinal injury at birth ..				
	(b) 761	Other birth injury .. .. .				
A 131	762	Postnatal asphyxia and atelectasis .. .. .				
A 132	(a) 764	Diarrhoea of newborn .. .. .				
	(b) 765	Ophthalmia neonatorum .. .. .				
	(c) 763	Pneumonia of new born .. .. .				
	(d) 766	Pemphigus neonatorum .. .. .				
	(e) 767	Umbilical sepsis .. .. .				
	(f) 768	Other sepsis of newborn .. .. .				
A 133	770	Haemolytic disease of newborn .. .. .				
A 134	769 } 771-772 }	All other defined diseases of early infancy ..				
A 135	(a) 773	Congenital debility .. .. .				
	(b) 774	Premature birth .. .. .				
	(c) 775-776	Other ill-defined diseases peculiar to early infancy and immaturity unqualified ..			41	41
		<i>Carried forward</i> ..	223,158	140,812	231,057	595,027



TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	223,158	140,812	231,057	595,027
		<b>XVI.—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.</b>				
A 136	794	Senility without mention of psychoses ..	2,536	1,620	..	4,156
A 137 (a)	780	Infantile convulsions .. .. .	..	..	30	30
(b)	788.8	Pyrexia of unknown origin .. .. .				
(c)	793	Observation, without need for further medical care .. .. .				
(d)	781-787 789-792 795 788.1-788.7 788.9	(a) Malingering .. .. .				
		(b) Sudden death (cause unknown) ..				
		(c) Found dead (cause unknown) ..				
		(d) Other ill-defined and unknown causes of morbidity and mortality .. ..	3,276	1,680	4,160	9,116
		<b>XVII.—ACCIDENTS, POISONINGS AND VIOLENCE.</b>				
		<b>"E" CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES).</b>				
AE 138	E 810-E 835	Motor vehicle accidents .. .. .	18	1	2	21
AE 139 (a)	E 800-E 802	Railway accidents .. .. .			1	1
(b)	E 850-E 858	Water transport accidents .. .. .	..	..		
(c)	E 860-E 866	Aircraft accidents .. .. .				
(d)	E 840-E 845	Other transport accidents .. .. .	66	16	82	164
AE 140 (a)	E 870	Accidental poisoning by morphia and other opium derivatives .. .. .				
(b)	E 874	Accidental poisoning by other analgesic and soporific drugs .. .. .				
(c)	E 878	Accidental poisoning by other and unspecified drugs .. .. .				
(d)	E 883	Accidental poisoning by corrosive aromatics, acids and caustic alkalis .. .. .				
(e)	E 884	Accidental poisoning by mercury and its compounds .. .. .				
(f)	E 885	Accidental poisoning by lead and its compounds .. .. .				
(g)	E 886	Accidental poisoning by arsenic and antimony and their compounds .. .. .				
(h)	E 888	Accidental poisoning by other and unspecified solid or liquid substances .. .. .				
(i)	E 890-E 895	Accidental poisoning by gases and vapours ..				
(j)	E 871-E 873 E 875-E 877 E 879-E 882 E 887	Other accidental poisoning .. .. .	..	1	..	1
AE 141	E 900-E 904	Accidental falls .. .. .	5,996	2,700	4,917	13,613
AE 142	E 912	Accident caused by machinery .. .. .	10	1	5	16
AE 143	E 916	Accident caused by fire and explosion of combustible material .. .. .				
AE 144	E 917-E 918	Accident caused by hot substance, corrosive liquid, steam and radiation .. .. .				
AE 145	E 919	Accident caused by firearm .. .. .	6	1	3	10
AE 146	E 929	Accidental drowning and submersion ..				
AE 147 (a)	E 920	Foreign body entering eye and adnexa ..				
(b)	E 923	Foreign body entering other orifice .. ..				
(c)	E 927	Accidents caused by bites and stings of venomous animals and insects .. ..	257	132	184	573
(d)	E 928	Other accidents caused by animals .. ..	24	7	26	57
AE 148 (a)	E 913	Accidents caused by cutting or piercing instruments .. .. .	6,426	3,168	3,944	13,538
(b)	E 914	Accidents caused by electric current ..				
(c)	E 925	Accidental mechanical suffocation .. ..				
(d)	E 926	Lack of care of infants under 1 year of age ..				
(e)	E 931	Excessive heat .. .. .				
(f)	E 932	Excessive cold .. .. .				
(g)	E 933	Hunger, thirst and exposure .. .. .	3	3	..	6
(h)	E 934	Cataclysm .. .. .				
		<i>Carried forward</i> ..	241,776	150,142	244,411	636,329

TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

## RETURN OF DISEASES FOR THE YEAR 1951—(cont.)

Inter- mediate list Number.	Detailed list Number.	Cause Groups—(Diseases).	New Cases. All Nationalities (including Europeans).			
			Adult Males.	Adult Females.	Children under 10 years.	Total.
		<i>Brought forward</i> ..	241,776	150,142	244,411	636,329
		<b>XVII.—ACCIDENTS, POISONINGS AND VIOLENCE—(cont.)</b>				
		<b>" E " CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSES)—(cont.)</b>				
(i)	E 935	Lightning ..				
(j)	E 936	(a) Accidents in mines and quarries ..	2			2
		(b) Agricultural and forestry accidents ..	174	81	95	350
		(c) Accidental injury by crushing or landslide ..				
		(d) Other and unspecified accidents ..				
(k)	E 940	Generalized vaccinia following vaccination ..			92	92
(l)	E 941-E 942	Other complications of smallpox vaccination ..	2	5	163	170
(m)	E 954	Anaesthetic accidents ..				
(n)	E 950-E953 } E 955-E959 }	Accidents due to medical or surgical intervention ..				
(o)	E 970	Suicide and self-inflicted injury by analgesic and soporific substances ..				
(p)	E 971	Suicide and self-inflicted injury by other solid and liquid substances ..				
(q)	E 972	Suicide and self-inflicted injury by gases in domestic use ..				
(r)	E 973	Suicide and self-inflicted injury by other gases ..				
(s)	E 974	Suicide and self-inflicted injury by hanging or strangulation ..				
(t)	E 975	Suicide and self-inflicted injury by submersion (drowning) ..				
(u)	E 976	Suicide and self-inflicted injury by firearms and explosives ..				
(v)	E 977	Suicide and self-inflicted injury by cutting or piercing instruments ..				
(w)	E 978	Suicide and self-inflicted injury by jumping from high place ..				
(x)	E 979	Suicide and self-inflicted injury by other and unspecified means ..				
(y)	E 910-E911 } E 915 } E 921-E922 } E 924-E930 } E 943-E946 } E 960-E965 }	All other accidental causes ..	83	39	53	175
AE 149	(a) E 980	Non-accidental poisoning by another person ..				
	(b) E 981	Assault by firearms and explosive ..				
	(c) E 982	Assault by cutting or piercing instruments ..	34	22	32	88
	(d) E 983	Assault by other means ..				
	(e) E 984	Injury by intervention of police ..				
	(f) E 985	Execution (legal) ..				
AE 150	E 990-E 999	Injury resulting from operations of war ..				
		<b>" N " CODE: ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING, AND VIOLENCE (NATURE OF INJURY).</b>				
AN 138	N 800-N 804	Fracture of skull ..				
AN 139	N 805-N 809	Fracture of spine and trunk ..				
AN 140	N 810-N 829	Fracture of limbs ..				
AN 141	N 830-N 839	Dislocation without fracture ..				
AN 142	N 840-N 848	Sprains and strains of joints and adjacent muscles ..				
AN 143	N 850-N 856	Head injury excluding fracture ..				
AN 144	N 860-N 869	Internal injury of chest, abdomen and pelvis ..				
AN 145	N 870-N 908	Laceration and open wounds ..				
AN 146	N 910-N 929	Superficial injury, contusion and crushing with intact skin surface ..				
AN 147	N 930-N 936	Effects of foreign body entering through orifice ..				
AN 148	N 940-N 949	Burns ..	286	219	504	1,009
AN 149	N 960-N 979	Effects of poisons ..	28	15	92	135
AN 150	N 950-N 959 } N 980-N 999 }	All other and unspecified effects of external causes ..				
		<b>TOTAL</b> ..	<b>242,385</b>	<b>150,523</b>	<b>245,442</b>	<b>638,350</b>



TABLE 7—(cont.)

## TRAVELLING DISPENSARIES OUT-PATIENTS—(cont.)

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1951

Nationalities.						New Cases. All Nationalities (including Europeans).			
						Adult Males.	Adult Females.	Children under 10 years.	Total. (A)
Europeans	..	..	..	..	..	4	..	..	4
Eurasians	..	..	..	..	..	29	29	47	105
Chinese	..	..	..	..	..	57,947	41,081	63,093	162,121
Indians	..	..	..	..	..	19,527	12,659	15,229	47,415
Malays	..	..	..	..	..	149,822	88,339	156,650	394,811
Javanese	..	..	..	..	..	7,217	3,304	6,264	16,785
Japanese	..	..	..	..	..				
Others	..	..	..	..	..	7,839	5,111	4,159	17,109
TOTAL						242,385	150,523	245,442	638,350

TABLE 8.

## DENTAL—SUMMARY OF WORK DONE FOR THE YEAR 1951.

State or Settlement.		Atten- dance.	EXTRACTIONS.		FILLINGS.				Sealings.
			Temporary teeth.	Permanent teeth.	Amalgam.	Silicate.	Inlay.	Root Filling.	
Kedah ..	..	18,020	4,784	9,434	6,958	1,086	69	70	2,298
Perlis ..	..	—	—	—	—	—	—	—	—
Penang and P. Wellesley ..	..	12,608	3,954	10,655	2,179	742	87	1	207
Perak ..	..	19,710	8,056	10,711	9,350	1,189	53	38	1,075
Selangor ..	..	17,481	7,867	10,934	4,466	655	23	23	665
Negri Sembilan ..	..	15,700	4,069	7,131	4,648	1,269	25	3	1,531
Malacca ..	..	12,310	2,234	3,770	4,369	1,037	13	—	303
Johore ..	..	24,420	6,010	7,608	10,759	990	66	44	843
Kelantan ..	..	2,883	983	931	1,920	143	2	—	225
Trengganu ..	..	5,701	825	4,486	1,504	513	28	5	377
Pahang ..	..	11,698	3,214	3,666	4,156	1,032	—	4	436
Federal Institutions ..	..	4,364	297	3,202	2,112	171	25	3	667
Dental Nurses' Training School, Penang ..	..	8,661	2,373	496	4,315	—	—	—	565
Dental Nurses in the Field ..	..	5,538	3,593	440	3,406	—	—	—	453
Total ..	Total	159,094	48,259	73,464	60,142	8,827	391	191	9,645



TABLE 9.

MICROSCOPICAL EXAMINATION OF BLOOD FILMS  
FOR THE YEAR 1951.

State or Settlement.	Number of patients examined.	NUMBER POSITIVE FOR MALARIAL PARASITES				Total number of examinations of blood films.
		S.T.	B.T.	Quartan.	Mixed infection.	
Kedah .. ..	18,510	1,810	1,036	16	19	19,434
Perlis.. ..	5,345	749	561	4	3	5,630
Penang & Province Wellesley .. ..	16,185	530	414	22	7	17,347
Perak .. ..	47,246	1,265	696	9	26	84,873
Selangor .. ..	32,288	561	263	23	25	58,342
Negri Sembilan ..	24,125	1,255	222	5	25	34,764
Malacca .. ..	11,161	1,224	201	2	6	12,217
Johore .. ..	21,760	1,163	445	11	204	24,753
Kelantan .. ..	8,611	903	442	11	3	8,733
Trengganu .. ..	1,915	128	116	11	5	2,175
Pahang .. ..	25,031	868	291	3	14	42,355
Total ..	212,177	10,456	4,687	117	337	310,623

TABLE 10.

MICROSCOPICAL EXAMINATION OF FAECES FOR  
WORM INFECTIONS FOR 1951.

State or Settlement.	Number of patients examined.	Number positive for entamoeba histolytica.	NUMBER POSITIVE FOR OVA.			Total number of examinations.
			Asearis lumbri-coides.	Ankylo-stoma duodenale.	Mixed infection.	
Kedah .. ..	12,784	216	4,141	2,899	1,053	13,857
Perlis.. ..	1,812	23	885	42	43	1,881
Penang & Province Wellesley .. ..	15,169	248	3,558	2,792	1,080	20,322
Perak .. ..	32,874	295	7,823	2,672	918	45,129
Selangor .. ..	25,414	179	6,260	3,136	2,325	32,776
Negri Sembilan ..	16,790	81	3,220	1,159	371	21,648
Malacca .. ..	7,236	52	794	1,103	3,089	8,065
Johore .. ..	16,840	118	5,140	2,178	2,392	19,187
Kelantan .. ..	5,379	96	1,020	256	882	5,452
Trengganu .. ..	1,931	144	384	194	637	2,375
Pahang .. ..	16,364	45	3,429	200	146	28,348
Total ..	152,593	1,497	36,654	16,631	12,936	199,040

TABLE 11.  
POST MORTEM EXAMINATIONS, 1951.

State or Settlement.					Medico- legal.	Clinical.
Kedah	..	..	..	..	231	6
Perlis	..	..	..	..	35	—
Penang and Province Wellesley				..	259	11
Perak	..	..	..	..	910	62
Selangor	..	..	..	..	717	83
Negri Sembilan	..	..	..	..	211	4
Malacca	..	..	..	..	153	19
Johore	..	..	..	..	552	50
Kelantan	..	..	..	..	68	2
Trengganu	..	..	..	..	18	2
Pahang	..	..	..	..	432	10
Total					3,586	249



TABLE 12.

RETURN OF VENEREAL DISEASES FOR THE YEAR 1951.  
A.—NEW CASES.

Nationalities.	SYPHILIS.				Gon- orrhoea.	Chan- croid.	Lympho- gran.	Comb. infect.	Non- venrl.	TOTAL.		
	Prim.	Sec.	Tert.	Congen.						M.	F.	
Chinese	M.	221	1,315	170	64	1,381	652	68	34	789	4,694	—
	F.	61	633	152	123	217	7	—	45	1,175	—	2,413
Indians	M.	166	1,029	90	39	844	735	65	53	717	3,738	—
	F.	52	515	72	55	90	8	2	7	683	—	1,484
Malays	M.	313	1,430	152	25	1,847	183	47	43	453	4,493	—
	F.	71	493	200	59	217	2	2	25	482	—	1,551
Europeans	M.	8	3	—	1	113	18	—	—	32	175	—
	F.	—	—	—	—	—	—	—	—	5	—	5
Others	M.	4	39	6	—	38	10	—	3	21	121	—
	F.	2	20	4	2	11	—	—	—	29	—	68
Total	M.	712	3,816	418	129	4,223	1,598	180	133	2,012	13,221	—
	F.	186	1,661	428	239	535	17	4	77	2,374	—	5,521
GRAND TOTAL										18,742		

TABLE 12—(cont.).

## RETURN OF VENEREAL DISEASES FOR THE YEAR 1951—(cont.).

## B.—RE-ATTENDANCES.

Nationalities.	SYPHILIS.			Gon- orrhoea.	Chan- croid.	Lympho- gran.	Comb. infect.	Non- venrl.	TOTAL.			
	Prim.	Sec.	Tert.						Con- gen.	M.	F.	
Chinese	M.	1,987	14,922	2,477	255	2,822	2,799	87	385	1,229	26,963	—
	F.	492	10,350	2,256	1,736	632	38	5	218	3,544	—	19,271
Indians	M.	1,224	11,136	963	129	2,376	2,558	243	497	892	20,018	—
	F.	335	6,954	872	457	226	20	8	124	1,939	—	10,935
Malays	M.	658	22,045	1,704	134	1,810	388	59	308	1,058	28,164	—
	F.	171	5,024	1,538	526	246	5	1	123	1,749	—	9,383
Europeans	M.	53	22	12	—	257	42	—	—	49	435	—
	F.	—	—	—	—	1	3	—	—	43	—	47
Others	M.	27	512	51	—	52	52	—	—	6	700	—
	F.	29	356	35	18	14	—	—	1	71	—	524
Total	M.	3,949	48,637	5,207	518	7,317	5,839	389	1,190	3,234	76,280	—
	F.	1,027	22,684	4,701	2,737	1,119	66	14	466	7,346	—	40,160
GRAND TOTAL . .										116,440		



TABLE 12—(cont.).  
 RETURN OF VENEREAL DISEASES FOR THE YEAR 1951—(cont.).  
 C.—ANALYSIS OF COMBINED INFECTIONS—NEW CASES ONLY.

	CHINESE.		INDIANS.		MALAYS.		EUROPEANS.		OTHERS.		TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
With Syphilis .. ..	33	45	50	6	38	25	—	—	3	—	124	76
With Gonorrhoea ..	32	44	49	6	37	25	—	—	3	—	121	75
With Chancroid ..	1	1	4	1	9	—	—	—	—	—	14	2
With Lymphogranuloma	2	—	3	1	2	—	—	—	—	—	7	1

TABLE 13.

## SUMMARY OF CHILD WELFARE CENTRES.

State/Settlement.	Permanent Centres.	Subsidiary Centres.	MEDICAL OFFICERS.		Health Sisters.	Health Nurses.	Dispensers or Hospital Assistants.	Midwives.
			Women.	Men.				
Kedah .. ..	4	38	—	—	2	6	—	3
Perlis .. ..	2	—	—	1 (P.T.)	—	1	—	5
Penang and P. Wellesley ..	15	8	—	—	2	12	1	24
Perak.. ..	6	8	—	—	6	22	1	24
Selangor .. ..	6	10	—	—	5	16	3	4
Negri Sembilan .. ..	6	2	1 (P.T.)	—	5	8	1 (P.T.)	3
Malacca .. ..	7	5	1	—	1	7	1	6
Johore .. ..	5	24	2	3 (P.T.)	5 (P.T.)	12	4	23
Kelantan .. ..	6	6	—	—	1	2	—	4
Trengganu .. ..	2	6	—	—	1	1	—	4
Pahang .. ..	7	38	—	—	3	6	—	4
Total ..	66	145	5	4	31	93	11	104

(P.T.) = Part Time.



TABLE 14.

## SUMMARY OF DISPENSARIES.

*(Excluding Hospital Out-Patient Dispensaries.)*

State/Settlement.	Total number.	Fixed.	TRAVELLING.		Medical Officers.	Health Sisters.	Health Nurses.	Dispensers or Hospital Assistants.	Midwives.	Others.
			Road.	River.						
Kedah .. ..	17	14	3	—	—	—	—	18	—	—
Perlis .. ..	7	6	1	—	1 (P.T.)	—	—	9	4	—
Penang and P. Wellesley ..	10	7	3	—	2	—	2	9	—	—
Perak .. ..	37	23	11	3	—	—	—	36	—	—
Selangor .. ..	19	13	6	—	2	—	—	22	—	—
Negri Sembilan .. ..	13	7	6	—	—	1	—	14	—	—
Malacca .. ..	9	4	5	—	1	—	—	11	—	—
Johore .. ..	31	13	14	4	8 (7 P.T.)	—	—	30 (4 P.T.)	—	—
Kelantan .. ..	16	6	8	2	—	—	—	10	—	—
Trengganu .. ..	10	5	4	1	2 (P.T.)	1	—	10	—	—
Pahang .. ..	20	9	7	4	1	—	—	14	—	—
Total ..	189	107	68	14	17	2	2	183	4	—

(P.T.) = Part Time.

TABLE 15.

ESTABLISHMENT—MEDICAL DEPARTMENT,  
FEDERATION OF MALAYA.

AS AT 1ST JANUARY, 1952.

(F)=Federal.      (S)=State or Settlement.

(N.P.)=New Post (underlined).

MEDICAL.

SUPERSCALE POSTS (71)—

The Superscale posts include three higher administrative posts. The remaining superscale posts number 68 and not more than 33 of them will normally be filled by officers recruited by the Secretary of State.

Director, Medical Services	...	...	(F)	1
Deputy Director, Medical Services	...	...	(F)	1
Director, Institute for Medical Research	...	...	(F)	1

ADMINISTRATIVE OFFICERS, GRADE "A" (10)—

Assistant Director, Medical Services	...	...	(F)	
Chief Medical Officer, Penang	...	...	(S)	
State Medical and Health Officer, Perak	...	...	(S)	
„ „ Selangor	...	...	(S)	
„ „ Negri Sembilan	...	...	(S)	
„ „ Pahang	...	...	(S)	
Principal Medical Officer, Johore	...	...	(S)	
State Surgeon, Kedah	...	...	(S)	
Chief Medical Officer, Malacca	...	...	(S)	
Chief Medical Officer, Kelantan	...	...	(S)	

SPECIALIST OFFICERS, GRADE "A" (7)—

Surgeon, Selangor	...	...	...	(S)
Ophthalmologist, Selangor	...	...	...	(S)
Radiologist, Selangor	...	...	...	(S)
Physician, Penang (Upgraded)	...	...	...	(F) (N.P.)
<u>Medical Superintendent, Central Mental</u>				
<u>Hospital, Tanjong Rambutan (Upgraded)</u>	...	...	...	(F) (N.P.)
<u>Medical Superintendent, Sungei Buloh Settle-</u>				
<u>ment, Sungei Buloh (Upgraded)</u>	...	...	...	(F) (N.P.)
<u>Senior Bacteriologist, Institute for Medical</u>				
<u>Research, Kuala Lumpur (Upgraded)</u>	...	...	...	(F) (N.P.)

ADMINISTRATIVE OFFICERS, GRADE "B" (12)—

Deputy State Medical and Health Officer, Perak	...	...	(S)	
„ „ „ Selangor	...	...	(S)	
Deputy State Surgeon, Kedah	...	...	(S)	
Deputy Principal Medical Officer, Johore	...	...	(S)	
Deputy Chief Medical Officer, Penang	...	...	(F)	
Chief Medical Officer, Trengganu	...	...	(S)	



TABLE 15—(cont.)

Senior Health Officer, Malacca	...	...	...	(S)
„ „ Penang	...	...	...	(S)
„ „ Perak	...	...	...	(S)
„ „ Kelantan	...	...	...	(S)
Medical Superintendent, General Hospital, Johore Bahru	...	...	...	(S)
Medical Superintendent, General Hospital, Kuala <u>Lumpur</u>	...	...	...	(S) (N.P.)

## SPECIALIST OFFICERS, GRADE “B” (39)—

## Senior Research Officers (4)—

Senior Pathologists	...	...	...	(F)	2
Senior Nutritional Research Officer	...	...	...	(F)	
Senior Malaria Research Officer	...	...	...	(F)	

## Physicians (6)—

Physician (Dermatology and V.D.)	...	...	...	(F)
„ Johore	...	...	...	(S)
„ Selangor	...	...	...	(S)
„ Perak	...	...	...	(S)
Physician and Radiologist, Kedah	...	...	...	(S)
Physician, Negri Sembilan	...	...	...	(S)

## Surgeons (9)—

Surgeon, Johore	...	...	...	...	(S)
„ Negri Sembilan	...	...	...	...	(S)
„ Penang	...	...	...	...	(F)
„ Perak	...	...	...	...	(S)
„ Selangor	...	...	...	...	(S)
„ Pahang	...	...	...	...	(S)
„ Kelantan	...	...	...	...	(S)
„ Kedah	...	...	...	...	(S)
„ Malacca	...	...	...	...	(S)

## Ophthalmologists (4)—

Ophthalmologist, Penang	...	...	...	(F)
„ Kedah	...	...	...	(S)
„ Johore	...	...	...	(S)
„ Perak	...	...	...	(S)

## Obstetricians (4)—

Obstetrician, Penang	...	...	...	(F)
„ Perak	...	...	...	(S)
„ Johore	...	...	...	(S)
<u>Obstetrician, Selangor</u>	...	...	...	(S) (N.P.)

## Senior Pathologists (2)—

Senior Pathologist, Penang	...	...	...	(F)
„ „ Johore	...	...	...	(S)

TABLE 15—(cont.)

## Tuberculosis Specialists (3)—

Tuberculosis Specialist, Federal	...	...	(F)
„ Perak	...	...	(S)
<u>Tuberculosis Specialist, Selangor</u>	...	...	(S) (N.P.)

## Radiologists (3)—

Radiologist, Negri Sembilan	...	...	(S)
„ Perak	...	...	(S)
„ Penang	...	...	(F)

## Ear, Nose and Throat Specialists (1)—

Ear, Nose and Throat Specialist, Perak	...	(S)
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## Anaesthetists (2)—

Anaesthetist, Johore	...	...	(S)
„ Selangor	...	...	(S)

## Child Health Specialist (1)—

Child Health Specialist, Federal	...	...	(F)
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## TIMESCALE MEDICAL AND HEALTH OFFICERS (245)—

(Of the 245 timescale Medical Officers the number of Expatriate Officers recruited by the Secretary of State will not exceed 83. The remaining posts will be filled by officers recruited in Malaya).

Research Students	...	...	...	...	2
House Surgeons	...	...	...	...	20

## DENTAL.

## SUPERSCALE GRADE “A” (1)—

Chief Dental Officer	...	...	...	(F)
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## SUPERSCALE GRADE “B” (2)—

Specialist Officer (Dental) ...	...	...	...	(F)
„ „ Johore	...	...	...	(S)

## TIMESCALE POSTS (DENTAL) (49)—

(Of these, Dental Officers recruited by the Secretary of State will not exceed 4).

House Surgeons (Dental)	...	...	...	8
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## RESEARCH OFFICERS (Non-Medical).

(All these officers are now recruited by the Secretary of State).

## RESEARCH OFFICERS (NON-MEDICAL) (5)—

Chief Biochemist, Superscale Grade “B”	...	(F)	1
Biochemists	...	(F)	2
Entomologists	...	(F)	2

## PHARMACEUTICAL.

(Three recruited by the Secretary of State).

Chief Pharmaceutical Chemist, Superscale Grade “B”	(F)	1
Superintending Pharmaceutical Chemists and Pharmacists	...	5



TABLE 15—(cont.)

## NURSING.

(In the group of Matrons, Nursing Sisters and Health Sisters, Expatriate Officers recruited by the Secretary of State will not exceed 115).

Principal Matron ...	...	...	...	...	1
Matron, Grade I ...	...	...	...	...	8
Matrons, Grade II ...	...	...	...	...	14
Sister Tutors ...	...	...	...	...	12
Sister Tutors (Dental) ...	...	...	...	...	1
Nursing Sisters ...	...	...	...	...	134
Dental Sisters ...	...	...	...	...	2
Health Matrons, Grade I ...	...	...	...	...	3
Health Sisters, Grade II ...	...	...	...	...	5
Health Sisters ...	...	...	...	...	41
Total ...					221

*Other appointments which may be filled by recruitments by the Secretary of State.*

Women Almoners ...	...	...	...	...	3
Women Dietitians... ..	...	...	...	...	2
Women Radiographers ...	...	...	...	...	4
Women Physiotherapists... ..	...	...	...	...	5
Total ...					14

Men: Superintendent, Orthopaedic Centre ...	...	...	...	...	1
Senior Male Nurses, Mental Hospital... ..	...	...	...	...	2
Male Nurse, Mental Hospital ...	...	...	...	...	1
Total ...					4

The foregoing statement covers duty posts only, and makes no provision for leave reserves.

*Trained Hospital and Public Health Staff.*

The following groups are all recruited in Malaya:

Lay Superintendent (Leper and Tuberculosis Settlements) ...	...	...	...	...	2
Chief Sanitary Inspectors ...	...	...	...	...	5
Field Nutrition Officer ...	...	...	...	...	1
Pharmacists ...	...	...	...	...	9
Radiographers (Hospital Assistants) ...	...	...	...	...	3
Health and Sanitary Inspectors ...	...	...	...	...	129
Laboratory Assistants ...	...	...	...	...	62
Dental Mechanics... ..	...	...	...	...	26
Hospital Assistants ...	...	...	...	...	1,047
Stewards ...	...	...	...	...	1
Nurses: Public Health ...	...	...	...	...	83
Hospital ...	...	...	...	...	957
Midwives ...	...	...	...	...	390

TABLE 15—(cont.)

## DETAILS OF STAFFING AS AT 1ST JANUARY, 1952.

Establishment.	Substan- tive holder in post.	Substan- tive holder on leave.	Tempo- rary.	Post vacant.
SUPERSCALE MEDICAL .. 71				24
Asians—				
Men .. .. .	16	—	—	—
Women .. .. .	—	—	—	—
Europeans—				
Men .. .. .	30	2	—	—
Women .. .. .	1	—	—	—
	47	2	—	24
TIMESCALE MEDICAL OFFICERS 245				73
Asians—				
Men .. .. .	76	8	40	—
Women .. .. .	3	1	8	—
Europeans—				
Men .. .. .	33	6	1	—
Women .. .. .	4	1	7	—
Leave Reserve .. .. 26	116	16	56	73
Research Students .. 2				2
House Surgeons .. .. 20				11
Asians—				
Men .. .. .	8	—	—	—
Women .. .. .	1	—	—	—
SUPERSCALE DENTAL .. 3				
Asians—				
Men .. .. .	1	—	—	—
Europeans—				
Men .. .. .	2	—	—	—
	3	—	—	—
TIMESCALE DENTAL OFFICERS 49				16
Asians—				
Men .. .. .	31	2	1	—
Women .. .. .	—	—	—	—
Europeans—				
Men .. .. .	—	—	—	—
Women .. .. .	—	—	1	—
Leave Reserve .. .. 1	31	2	2	16
House Surgeons .. .. 8				5
Asians—				
Men .. .. .	2	—	—	—
Women .. .. .	1	—	—	—
RESEARCH OFFICERS (NON-MEDICAL) :				
Superscale .. .. 1				
European (Men) .. .. .	1	—	—	—
Timescale .. .. 4				1
Europeans—				
Men .. .. .	2	1	—	—
Women .. .. .	1	—	—	—
	4	1	—	1
PHARMACEUTICAL :				
Superscale .. .. 1				
Europeans—				
(Men) .. .. .	1	—	—	—
Timescale .. .. 5				1
Asians—				
(Men) .. .. .	1	—	—	—
Europeans—				
(Men) .. .. .	3	—	—	—
Leave Reserve .. .. 1	5	—	—	1



TABLE 15—(cont.)

## DETAILS OF STAFFING AS AT 1ST JANUARY, 1952—(cont.)

Establishment.	Substan- tive holder in post.	Substan- tive holder on leave.	Tempo- rary.	Post vacant.
<b>NURSING :</b>				
Principal Matron .. .. 1	1	—	—	—
Matrons, Grade I .. .. 8	7	2	—	1
Matrons, Grade II .. .. 14	13	1	—	1
Sister Tutors: .. .. 13				3
Asian (Women) .. .. ..	5	—	—	—
Europeans (Women) .. ..	5	—	—	—
Nursing Sisters .. .. 134				35
Asian (Women) .. .. ..	38	1	5	—
Europeans (Women) .. ..	44	1	12	—
Dental Sisters .. .. 2	—	—	—	2
Health Matrons, Grade I .. 3	—	—	—	3
Health Matrons, Grade II .. 5	—	—	—	5
Health Sisters .. .. 41				18
Asian (Women) .. .. ..	2	—	—	—
Europeans (Women) .. ..	16	2	5	—
Leave Reserve .. .. 24	131	7	22	68
<b>OTHER APPOINTMENTS :</b>				
Almoners .. .. 3	1	—	1	1
Dietitians .. .. 2	—	—	—	2
Radiographers .. .. 4	3	1	—	1
Physiotherapists .. .. 5	3	—	—	2
(All European Women)				
Superintendent, Ortho- paedic Centre .. .. 1				
European (Man) .. .. ..	1	1	—	—
Mental Hospital :				
Senior Male Nurses .. 2				
European (Men) .. .. ..	2	—	—	—
Male Nurse .. .. 1				
Asian (Man) .. .. ..	1	—	—	—